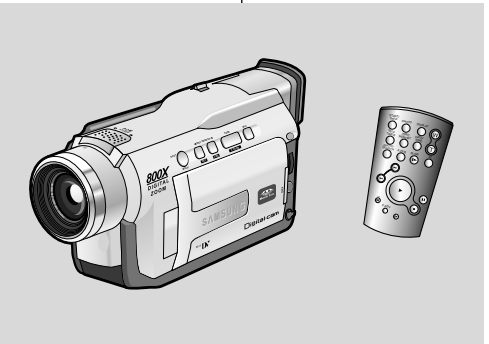
ENGLISH

Digital Video Camcorder

Mini DV Digital Video Cassette

VP-D23/D24
VP-D23i/D24i

AF Auto Focus
CCD Charge Coupled Device
LCD Liquid Crystal Display



Owner's Instruction Book

Before operating the unit, please read this instruction book thoroughly, and retain it for future reference.

SAMSUNG ELECTRONICS

This product meets the intent of Directive 89/336 CEE, 73/23 CEE, 93/68 CEE.

中文

数字摄录一体机

Mini DV Digital Video Cassette

VP-D23/D24
VP-D23i/D24i

AF 自动调焦
CCD 电荷耦合器
LCD 液晶显示屏

用户说明书

在操作摄录一体机之前，请仔细阅读本说明书，并将其保存好，以便将来查阅。

本产品符合
89/336 CEE、73/23 CEE、93/68 CEE等准则

AD68-00616K

ENGLISH

Contents

Notes and Safety Instructions 6

Getting to Know Your Camcorder 11

Features 11
Accessories Supplied with camcorder 12
Front & Left View 13
Left side View 14
Right & Top View 15
Rear & Bottom View 16
Remote control 17
OSD (On Screen Display in CAMERA and PLAYER modes) 18
OSD (On Screen Display in M.REC and M.PLAY modes) 19
Turning the OSD on/off (On Screen Display) 19

Preparation 20

How to use the Remote Control 20
Battery Installation for the Remote Control 20
Self Record using the Remote Control 20
Lithium Battery Installation 21
Adjusting the Hand Strap 22
Hand strap 22
Shoulder strap 22
Connecting a Power Source 23
To use the AC Power adapter and DC Cable 23
To select the CAMCORDER mode 23
Using the Lithium Ion Battery Pack 24
Charging the Lithium Ion Battery Pack 24
Table of continuous recording time based on model and battery type 25
Battery level display 26
Inserting and Ejecting a Cassette 27

BASIC Recording 28

Making your First Recording 28
Record Search (REC SEARCH) 29
Hints for Stable Image Recording 30
Recording with the LCD monitor 30
Recording with the Viewfinder 30
Adjusting the LCD 31
Using the VIEWFINDER 32
Adjusting the Focus 32

中文

目录

注意事项和安全说明 6

摄录一体机的基本常识 11

特点 11
随摄录一体机所提供的配件 12
正视图和左视图 13
左侧视图 14
右视图和顶视图 15
后视图和底视图 16
遥控器 17
OSD（摄像机和放像机模式下的在屏显示） 18
OSD（照片录制和照片播放模式下的在屏显示） 19
打开和关闭OSD（在屏显示) 19

准备 20

如何使用遥控器 20
遥控器电池的安装 20
使用遥控器的Self Record（自拍) 20
锂电池的安装 21
调整手带 22
手带 22
肩带 22
连接电源 23
使用交流电源适配器和直流电源线 23
选择摄像机模式 23
使用锂离子电池组 24
对锂离子电池组充电 24
基于不同电池型号和类型的连续录制时间表 25
电池电量显示标识 26
插入和退出盒带 27

基本拍摄技术 28

首次拍摄 28
拍摄记录搜索 (REC SEARCH) 29
拍摄稳定图像须知 30
使用LCD显示器拍摄 30
使用取景器拍摄 30
调整液晶显示屏 31
使用VIERFINDER（取景器） 32
调节焦距 32

ENGLISH

Contents

Playing back a tape you have recorded on the LCD 33
Adjusting the LCD during PLAY 34
Controlling Sound from the Speaker 34

Advanced Recording 35

Use of various Functions 35
Setting menu items 35
Set the camcorder to CAMERA or PLAYER mode and M.REC or M.PLAY mode 35
Availability of functions in each mode 36
CLOCK SET 37
REMOCON 38
BEEP SOUND 39
SHUTTER SOUND 40
DEMONSTRATION 41
PROGRAM AE 42
Setting the PROGRAM AE 43
WHT. BALANCE (WHITE BALANCE) 44
Zooming In and Out with DIGITAL ZOOM 45
Zooming In and Out 45
Digital Zoom 46
DIS (Digital Image Stabilizer) 47
DSE (Digital Special Effects) SELECT 48
Selecting an effect 49
REC MODE 50
AUDIO MODE 51
WIND CUT 52
DATE/TIME 53
TV DISPLAY 54
Using Quick Menu 55
Setting the Quick menu 56
SHUTTER SPEED & EXPOSURE 57
SLOW SHUTTER(Low Shutter Speed) 58
EASY Mode (for Beginners) 59
MF/AF (Manual Focus/Auto Focus) 60
Auto Focusing 60
Manual Focusing 60
BLC (Back Light Compensation) 61
Fade In and Out 62
To Start Recording 62
To Stop Recording (use FADE IN / FADE OUT) 62
Audio dubbing 63
Dubbing sound. 63

中文

目录

在液晶显示屏上播放拍摄的录像带 33
在PLAY（播放）期间调节液晶显示屏 34
控制扬声器的声音 34

高级拍摄技巧 35

使用各种功能 35
设置菜单项 35
将摄录一体机设置为摄像机、放像机、照片录制或照片播放模式 35
各个模式下的功能实用性 36
CLOCK SET（时钟设置） 37
REMOCON（遥控） 38
BEEP SOUND（蜂鸣音） 39
SHUTTER SOUND（快门音） 40
DEMONSTRATION（演示状态） 41
PROGRAM AE（程序自动曝光） 42
设置程序自动曝光 43
WHT.BALANCE（WHITE BALANCE，白平衡） 44
采用DIGITAL ZOOM（数字变焦）拉近和推远 45
Zooming In and Out（推近和拉远） 45
Digital Zoom（数字变焦） 46
DIS（Digital Image Stabilizer，数字图像稳定器） 47
DSE（Digital Special Effects，数字特殊效果）选择 48
选择效果 49
REC MODE（录制模式 ） 50
AUDIO MODE（音频模式） 51
WIND CUT（风声消除） 52
DATE/TIME（日期时间 ） 53
TV DISPLAY（电视显示 ） 54
使用快捷菜单 55
设置快捷菜单 56
SHUTTER SPEED & EXPOSURE（快门速度和曝光 ） 57
SLOW SHUTTER（低速快门） 58
EASY（简易）模式（用于初学者） 59
MF/AF（Manual Focus/Auto Focus，手动聚焦/自动聚焦） 60
自动聚焦 60
手动聚焦 60
BLC（Back Light Compensation，背光补偿） 61
Fade In and Out（淡入和淡出） 62
开始拍摄 62
停止拍摄（使用淡入/淡出） 62
音频配音 63
配音. 63

ENGLISH

Contents

Dubbed Audio Playback 64
PHOTO Image Recording 65
Searching for a PHOTO picture 65
NIGHT CAPTURE (0 lux recording) 66
POWER NIGHT CAPTURE 67
Using the VIDEO LIGHT 68
Various Recording Techniques 69

Playback 70

Tape Playback 70
Playback on the LCD 70
Playback on a TV monitor 70
Connecting to a TV which has Audio Video input jacks 70
Connecting to a TV which has no Audio and Video input jacks 71
Playback 71
Various Functions while in PLAYER mode 72
Playback pause 72
Picture search (Forward/Reverse) 72
Slow playback (Forward/Reverse) 72
Frame advance (To play back frame by frame) 73
X2 Playback (Forward/Reverse) 73
ZERO MEMORY 74
PB DSE (Playback Digital Special Effects) 75
PB ZOOM 76

Recording in PLAYER mode (VP-D23i/D24i only) 77

IEEE 1394 Data Transfer 78

Transferring IEEE1394 (i.LINK)-DV standard data connections 78
Connecting to a DV device 78
Connecting to a PC 78
System requirements 79
Recording with a DV connection cable (VP-D23i/D24i only) 79

USB interface 80

Transferring a Digital Image through a USB Connection 80
System Requirements 80
Installing DVC Media 5.0 Program 81
Connecting to a PC 82

Digital Still Camera mode 83

MEMORY STICK (VP-D24(i) only) 83
Memory Stick Functions 83

中文

目录

播放配音音频 64
拍摄照片 65
照片搜索 65
NIGHT CAPTURE（夜间拍摄）(0 lux拍摄) 66
POWER NIGHT CAPTURE（超强夜间拍摄） 67
使用VIDEO LIGHT（音频灯） 68
各种拍摄技巧 69

播放 70

录像带的播放 70
在液晶显示屏上播放 70
在电视上播放 70
将摄录一体机与带有A/V输入插孔的电视机相连 70
连接到不带音频和视频输入插孔的电视上 71
播放 71
PLAYER（播放）模式下的各种功能. 72
播放暂停 72
图像搜索（快进/快倒） 72
慢放（向前/向后） 72
帧步进（逐帧播放） 73
X2播放（快进/快退） 73
ZERO MEMORY（零点记忆） 74
PB DSE（播放数字特殊效果） 75
PB ZOOM（播放缩放） 76

在PLAYER(播放)模式录制(仅限于VP-D23i/D24i) 77

IEEE 1394 数据传输 78

传送IEEE1394（i.LINK）-DV标准数据连接 78
与DV设备相连 78
与PC机相连 78
系统要求 79
使用DV电缆连接录制（仅限于VP-D23i/D24i） 79

USB 接口 80

通过USB连接传送数字图像 80
系统要求 80
安装DVC Media 5.0 程序 81
连接至PC 82

数码照相机模式 83

记忆棒（只限于VP-D24(i)） 83
记忆棒的功能 83

ENGLISH

Contents

Inserting and ejecting the Memory Stick 84
Structure of folders and files on the Memory Stick 85
Image Format 85
Selecting the CAMCORDER mode 85
Selecting the image quality 86
Select the image quality 86
Number of images on the Memory Stick 86
Recording Still images to a Memory Stick in M.REC Mode 87
Recording images to a Memory Stick 87
Recording an image from a cassette as a still image 88
Viewing Still images 89
To view a Single image 89
To view a slide show 89
To view the Multi Screen 90
Copying still images from a cassette to Memory Stick 91
Marking images for printing 92
Protection from accidental erasure 93
Deleting Still images 94
Formatting the Memory Stick 95
Attention 95
MPEG REC 96
MPEG PB 97

Maintenance 98

After finishing a recording 98
Cleaning and Maintaining the Camcorder 99
Cleaning the Video Heads 99
Using Your Camcorder Abroad 100
Power sources 100
Colour system 100

Troubleshooting 101

Troubleshooting 101
Self Diagnosis Display 101
Moisture Condensation 101
Self Diagnosis Display in M.REC, M.PLAY mode 102

Specifications 104

INDEX 105

中文

目录

插入和取出记忆棒 84
记忆棒上文件夹和文件的结构 85
图像格式 85
选择摄录一体机模式 85
选择图像质量 86
选择图像质量 86
记忆棒上图像的质量 86
在照片录制模式将静止图像录制到记忆棒上 87
录制图像到记忆棒上 87
从录像带图像制作静止图像 88
观看静止图像 89
若要观看单幅图像 89
若要观看顺序播放 89
若要观看多个画面 90
从录像带上复制静止图像到记忆棒上 91
在图像上做打印标记 92
防止意外擦除 93
删除静止图像 94
格式化记忆棒 95
注意 95
保存MPEG 96
播放MPEG 97

维护 98

完成拍摄后 98
清洁和维护摄录一体机 99
清洁视频磁头 99
在国外使用摄录一体机 100
电源 100
彩色制式 100

故障排除 101

故障排除 101
自诊断显示 101
结露 101
在照片录制/照片播放模式自诊断显示 102

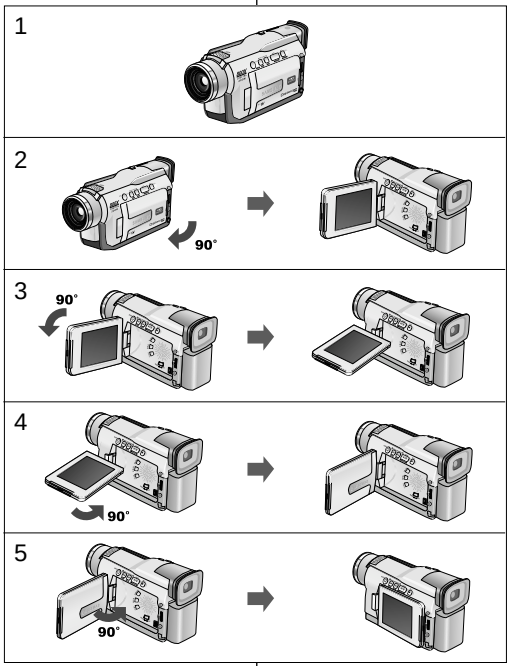
技术规格 104

索引 105

Notes regarding the rotation of the LCD screen

Please rotate the LCD screen carefully as illustrated.
Over rotation may cause damage to the inside of the hinge that connects the LCD screen to the Camcorder.

1. LCD screen closed.
2. Standard recording using the LCD screen.
3. Recording when looking at the LCD screen from the top.
4. Recording when looking at the LCD screen from the front.
5. Recording with the LCD screen closed.



有关旋转LCD（液晶显示）屏的注意事项

请按说明 小心地旋转液晶显 示屏。
过度旋转 会造成连接液晶显 示屏与摄录一体 机的铰链的损坏 。

1. 液晶显示 屏处于关闭状态中。
2. 使用液晶 显示屏的标准录制。
3. 从液晶显 示屏上方俯视时录 制。
4. 从液晶显 示屏前方正视时录 制。
5. 在液晶显 示屏关闭时录制。

Notices regarding COPYRIGHT (VP-D23i/D24i only)

Television programs, video tapes, DVD titles, films, and other program materials may be copyrighted.
Unauthorized copying of copyrighted material may be against the law.

Notes regarding moisture condensation

1. A sudden rise in atmospheric temperature may cause condensation to form inside the camcorder.

for example:

- When you move the camcorder from a cold location to a warm location (e.g. from outside to inside during winter.)
- When you move the camcorder from a cool location to a hot location (e.g. from inside to outside during the summer.)

2. If the (DEW) protection feature is activated, leave the camcorder for at least two hours in a dry, warm room with the cassette compartment opened and the battery removed.

Notes regarding CAMCORDER

1. Do not leave the camcorder exposed to high temperature (above 60°C or 140°F).
   For example, in a parked car in the sun or exposed to direct sunlight.

2. Do not let the camcorder get wet.
   Keep the camcorder away from rain, sea water, and any other form of moisture. If the camcorder gets wet, it may get damaged.
   Sometimes a malfunction due to exposure to liquids cannot be repaired.

有关版权的注意事项（仅VP-D23i/D24i）

电视节目、录像带、DVD节目、影片和其它节目资料可能已受版权保护。
未经授权复制受版权保护的资料可能违法。

有关结露的注意事项

1. 气温的突然升高会导致摄录一体机内部结露。

例如

- 将摄录一体机从寒冷的地方带入温暖的地方（如，冬季从室外将其携带入室内）。
- 将摄录一体机从凉爽的地方带入炎热的地方（如，夏季从室内将其携带到室外）

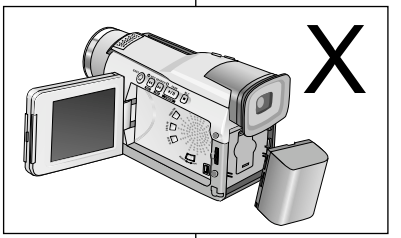
2. 如果启动了（DEW，结露）保护功能，则请将摄录一体机放置在干燥、温暖的室内至少两个小时，并打开盒带带舱取出电池。

有关摄录一体机的注意事项

1. 请不要把摄录一体机暴露于高温下（60°C 或140°F以上）。
   例如：在阳光下停放的小车里或在阳光直射之下。

2. 请不要让摄录一体机受潮。
   将摄录一体机远离雨水、海水和任何形式的潮气。
   如果受潮，摄录一体机便会受到损坏。
   有时，由于受潮而产生的故障将无法修复。

Notes regarding the battery pack



- Make sure that the battery pack is fully charged before starting to record.
- To preserve battery power, keep your camcorder turned off when you are not operating it.
- If your camcorder is in CAMERA mode, and it is left in STBY mode without being operated for more than 5 minutes with a tape installed, it will automatically turn itself off to protect against unnecessary battery discharge.
- Make sure that the battery pack is fitted firmly into place.
  Dropping the battery pack may damage it.
- A brand new battery pack is not charged.
  Before using the battery pack, you need to charge it completely.
- It is a good idea to use the viewfinder rather than the LCD when making long recordings, because the LCD uses up more battery power.

* When the battery reaches the end of its life, please contact your local dealer. The batteries have to be dealt with as chemical waste.

Notes regarding the Video Head Cleaning

- To ensure normal recording and a clear picture, clean the video heads regularly. If a square block-shape distorts playback, or only a blue screen is displayed, the video heads may be dirty. If this happens, clean the video heads with a dry type cleaning cassette.
- Do not use a wet-type cleaning cassette. It may damage the video heads.

有关电池组的注意事项

- 在开始录制之前，保证电池组充电完全。
- 为了保存电池能量，请在不使用摄录一体机时关闭摄录一体机。
- 如果摄录一体机处于CAMERA（摄像机）模式并保持在STBY（待机）模式下工作超过5分钟，且装入了录像带，机器就会自动关闭以防止电池不必要的放电。
- 保证电池组已经牢固地安装在其位。
  若电池组从高空摔落便会导致其损坏。
- 全新的电池组并不带电。
  在使用电池组之前，请将电池组充满电。
- 当长时间录制时，最好使用取景器来代替液晶显示屏，因为液晶显示屏会消耗更多的电池电源。

* 在电池到达其使用寿命时，请与本地的经销商联系。
必须按化学废品处理方式处理电池。

有关视频磁头清洁的注意事项

- 为了保证正常录制和清晰的画面，请定期清洁视频磁头。
  如果出现马赛克失真或在播放期间只显示蓝屏，则说明可能是视频磁头较脏。
  如果发生这种情况，用干式清洁盒带清洁视频磁头。
- 不要使用湿式清洁盒带，那样有可能会损坏视频磁头。

ENGLISH

Notes and Safety Instructions

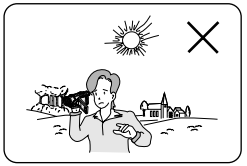
Note regarding the LENS

- Do not film with the camera lens pointing directly at the sun.
  Direct sunlight can damage the CCD(Charge Coupled Device).

Notes regarding electronic viewfinder

1. Do not position the camcorder such that the viewfinder is pointing towards the sun.
   Direct sunlight can damage the inside of the viewfinder. Be careful when placing the camcorder under sunlight or near a window exposed to sunlight.
2. Do not pick up the camcorder from the viewfinder.
3. Over-rotating of the viewfinder may damage it.

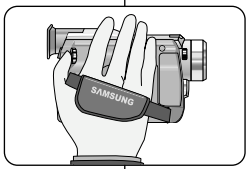
Notes regarding 'Record' or 'Playback' using the LCD



1. The LCD display has been manufactured using high precision technology.
   However, there may be tiny dots (red, blue or green in colour) that appear on the LCD display.
   These dots are normal and do not affect the recorded picture in any way.
2. When you use the LCD display under direct sunlight or outdoors, it maybe difficult to see the picture clearly.
   If this occurs, we recommend using the viewfinder.
3. Direct sunlight can damage the LCD monitor.

Notes regarding the hand strap

- To ensure a steady picture during filming, check that the hand strap is properly adjusted.
- Do not force your hand into the hand strap as you could damage it.



中文

注意事项和安全说明

有关镜头的注意事项

- 拍摄时，请不要将摄像机镜头直接朝向太阳。
  阳光的直射会损坏CCD（Charge Coupled Device，电荷耦合器）。

有关电子取景器注意事项

1. 请不要将摄录一体机放置在取景器朝向太阳的地方。
   阳光的直射会损坏取景器的内部器件。
   在阳光下或靠近受阳光照射的窗户使用摄录一体机时请小心。
2. 不要从取景器处握取摄录一体机。
3. 取景器的过度旋转会损坏取景器。

有关使用液晶显示屏"Record"（拍摄）或"Playback"（播放）的注意事项

1. 液晶显示屏是采用尖端科技制造而成的。
   然而，液晶显示屏上可能会出现小点（红色、蓝色或绿色）。
   这些小点属于正常现象，不会影响录制的图像。
2. 在阳光直射的条件下或户外使用液晶显示屏时，很难看清图像。
   如果出现这种情况，我们建议使用取景器。
3. 阳光直射会损坏液晶显示屏的显示器。

有关手带的注意事项

- 为了保证拍摄期间图像的稳定，请检查手带是否已经被适当地调节好。
- 不要将手伸入手带内，那样会损坏手带。

Precautions regarding the Lithium battery

1. The lithium battery maintains the clock function and user settings; even if the battery pack or AC adapter is removed.
2. The lithium battery for the camcorder lasts about 6 months under normal operation from time of installation.
3. When the lithium battery becomes weak or dead, the date/time indicator will flash for about five seconds when you set the power switch to CAMERA.
   In this case, replace the lithium battery with a new one (type CR2025).
4. Danger of explosion if battery is incorrectly replaced.
   Replace only with the same or equivalent type.

Warning: Keep the LITHIUM BATTERY out of reach of children.
Should a battery be swallowed, consult a doctor immediately.

Notice regarding VIDEO LIGHT

Danger:

- The Video Light can become extremely hot. Do not touch it during operation or after turning it off, otherwise serious injury may result. Wait 5 minutes (approx.) for the light to cool down.
- Do not place the camcorder into the carrying case immediately after using the video light. The video light will be hot. Please allow time for it to cool down.
- Do not use it near flammable or explosive materials.
- It is recommended that you consult your nearest SAMSUNG dealer for replacement bulbs.
- Not to be handled by children. Emits intense heat and light. Use with caution to reduce the risk of fire or injury to persons.

DANGER: DO NOT DIRECT LIGHT AT PERSONS OR MATERIALS LOCATING LESS THAN FOUR FEET DURING USE. DISCONNECT WHEN NOT IN USE.

DANGER: TO PREVENT POSSIBLE BURN HAZARD, DISCONNECT THE SUPPLY CORD AND ALLOW THE LAMP TO COOL DOWN BEFORE REPLACING.

有关锂电池的注意事项

1. 即使取出了电池组或交流适配器，摄录一体机内的锂电池仍会维持时钟功能和用户设置。
2. 从安装之时起，摄录一体机内的锂电池在正常操作下可使用约6个月。
3. 当锂电池电量不足或耗尽时，若把电源开关设置为CAMERA（摄像机），日期/时间指示标识会闪烁约五秒钟。
   在这种情况下，请用一个新锂电池（CR 2025型）更换锂电池。
4. 如果电池未被正确更换，那么将会有爆炸的危险。
   只能使用相同的或同类的电池进行更换。

警告： 让小孩远离锂电池。
如果误吞了电池，请立即找医生救治。

有关VIDEO LIGHT（视频灯）的注意事项

危险：

- 视频灯的温度会急剧升高。在拍摄期间以及拍摄之后，请不要触摸它，否则会导致严重的伤害。静候5分钟（大约）以便灯冷却。
- 请不要在使用完视频灯后直接将摄录一体机放置于手提箱中。否则，摄像灯会过热。
  请耐心等候其冷却。
- 请不要将摄录一体放置在易燃易爆的物品附近。
- 建议您在换置灯泡时就近咨询SAMSUNG（三星）经销商。
- 不要让儿童拿取。视频灯将放射强光和强热。
  请小心使用以减少火灾或人为的损伤。

危险： 不要对四英尺内的人或物品使用直射光源。
在不用时，请将视频灯取下。

危险： 为了防止灼伤事故的发生，请在换置灯泡时，摘除电源线并让灯冷却。

Features

- Digital data transfer function with IEEE1394
  By incorporating the IEEE 1394 (i.LINK™ : i.LINK is a serial data transfer protocol and interconnectivity system, used to transmit DV data) high speed data transport port, both moving and still images can be transferred to a PC, making it possible to produce or edit various images.
- USB interface for digital image data transfer
  You can transfer still images to a PC using the USB interface without an add-on card.
- PHOTO
  The PHOTO function lets you capture an object as a still along with sound, while in Camera mode.
- 800x Digital zoom
  Allows you to magnify an image up to 800 times its original size.
- Colour TFT LCD
  A high-resolution colour TFT LCD gives you clean, sharp images as well as the ability to review your recordings immediately.
- Digital Image Stabilizer (DIS)
  The DIS compensates for any handshake, reducing unstable images particularly at high magnification.
- Various digital effects
  The DSE (Digital Special Effects) allows you to give your films a special look by adding various special effects.
- Back Light Compensation (BLC)
  The BLC function compensates for the bright background behind a subject you're recording.
- Program AE
  The Program AE enables you to alter the shutter speed and aperture to suit the type of scene/action to be filmed.
- NIGHT CAPTURE
  The NIGHT CAPTURE function enables you to record a subject in a dark place.
- MPEG REC
  MPEG REC function is able to store CAMERA pictures in MEMORY STICK.

特点

- 使用IEEE1394的数字数据传输功能通过结合IEEE 1394
  通过结合IEEE 1394 （i.LINK™：i.LINK是一种串行数据传输协议和互连性系统，用于传送DV数据）高速数据传输端口，可将动态图像和静态图像传输到计算机上，使得制作或编辑各类图像成为可能。
- 用于数字图像数据传输的USB接口
  您可以使用USB接口将静态图像传输到计算机上，而不用外接卡。
- PHOTO（拍照）
  PHOTO（拍照）功能可以允许您在Camera（摄像机）模式拍摄有声的静态物体。
- 800x 数字变焦
  允许您将一个图像放大到原始大小的800倍。
- Colour TFT LCD（彩色TFT液晶显示屏）
  高分辨率的彩色TFT液晶显示屏可以为您提供清晰明亮的图像以及即时查看拍摄效果的能力。
- DIS （Digital Image Stabilizer，数字图像稳定器）
  DIS可以补偿手抖，尤其是在较高的放大率下，它可以减少不稳定的图像。
- 各种数字效果
  DSE（Digital Special Effects，数字特殊效果）允许您通过添加各种特殊效果来让摄影别具一格。
- BLC（Back Light Compensation，背光补偿）
  BLC（背光补偿）功能可以补偿物体后面的明亮的背景。
- Program AE（程序自动曝光）
  Program AE（程序自动曝光）可以帮助您调节快门速度和光圈，以适应被摄场景/动作类型。
- NIGHT CAPTURE（夜间拍摄）
  NIGHT CAPTURE（夜间拍摄）功能可以帮助您在黑暗处拍摄景像。
- MPEG REC
  MPEG REC功能可以在记忆棒中存储CAMERA图像。

Accessories Supplied with camcorder

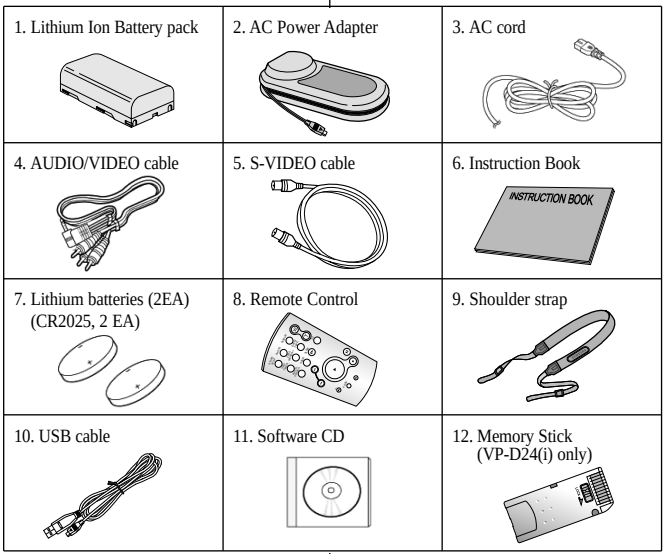
Make sure that the following basic accessories are supplied with your digital video camera.

Basic Accessories

1. Lithium Ion Battery pack
2. AC Power Adapter
3. AC Cord
4. AUDIO/VIDEO cable
5. S-VIDEO cable
6. Instruction Book
7. Lithium batteries for Remote Control and Clock. (TYPE: CR2025, 2 EA)
8. Remote Control
9. Shoulder strap
10. USB cable
11. Software CD
12. Memory Stick (VP-D24(i) only)

Optional Accessory

13. Scart adapter



随摄录一体机所提供的配件

请确认已 随数字视频摄录一体机提供了以下 基本配件。

基本配件

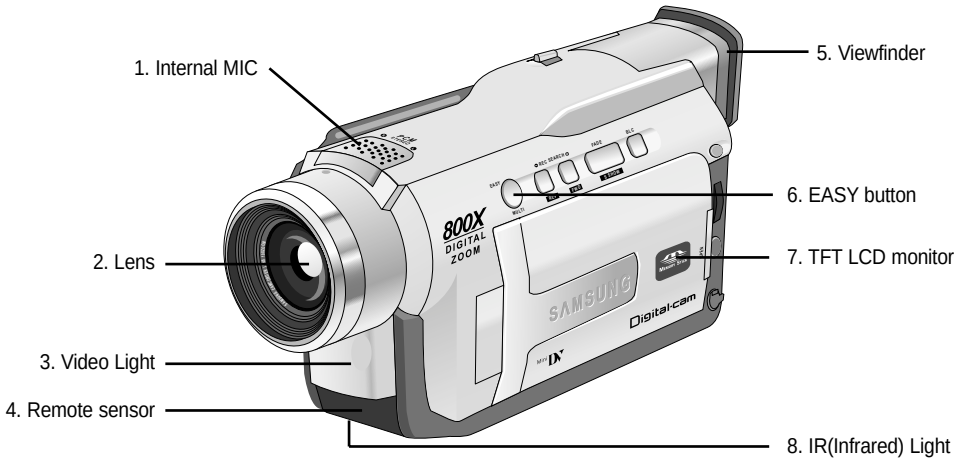
1. 锂离子电 池组
2. 交流电源 适配器
3. 交流线
4. A/V线（音频/视频线）
5. S-视频线
6. 说明书
7. 遥控器及 时钟用的锂电池（类型：CR2025, 2EA）
8. 遥控器
9. 肩带
10. USB线
11. 软件CD
12. 记忆棒

（仅限于VP-D24(i)）

可选附件

13. Scart适配器

Front & Left View

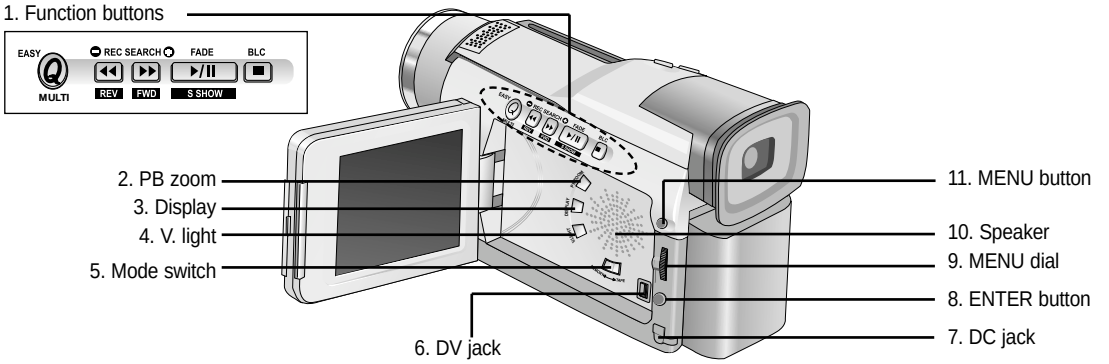


1. Internal MIC
2. Lens
3. Video Light
4. Remote sensor
5. Viewfinder (see page 32)
6. EASY button (see page 59)
7. TFT LCD monitor
8. IR(Infrared) Light

正视图和左视图

1. 内置麦克风
2. 镜头
3. 视频灯
4. 遥控传感器
5. 取景器（见第32页）
6. EASY（简易）按钮（见第59页）
7. TFT LCD显示器
8. IR（红外线）灯

Left Side View



1. Function buttons

PLAYER	CAMERA	M.PLAY
-	EASY	MULTI
◀◀ : (REW)	REC SEARCH –	REV
▶▶ : (FF)	REC SEARCH +	FWD
▶/II: (PLAY/STILL)	FADE	SLIDE SHOW
■ : (STOP)	BLC	-

2. PB zoom
3. Display
4. V. light
5. Mode switch (TAPE/MEMORY STICK)
6. DV jack
7. DC jack
8. ENTER button
9. MENU dial
10. Speaker
11. MENU button

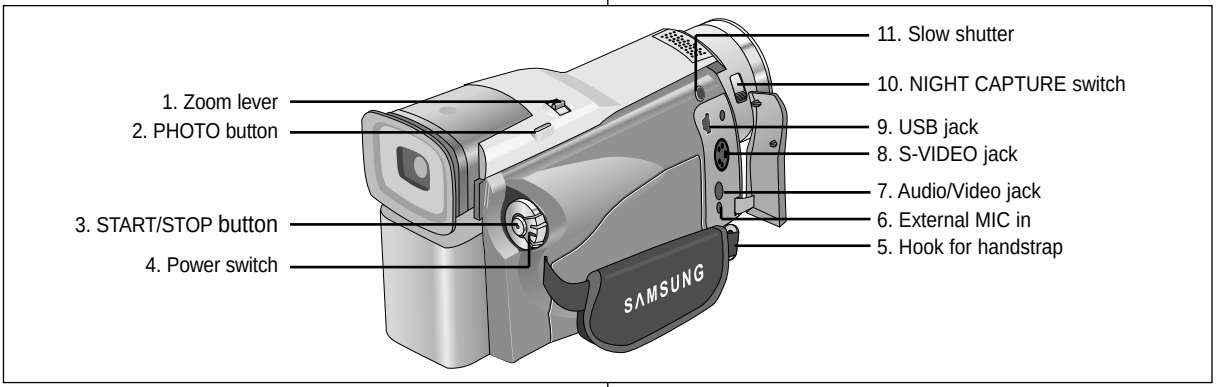
左视图

1. 功能按钮

放像机	摄像机	M.PLAY
-	EASY（简易）	MULTI
◀◀ : (REW)(快倒)	REC SEARCH – (拍摄记录搜索-)	REV
▶▶ : (FF)(快进)	REC SEARCH +(拍摄记录搜索+)	FWD
▶/II: (PLAY/STILL)(播放静止)	FADE(淡入淡出)	SLIDE SHOW
■ : (STOP)(停止)	BLC（背光补偿）	-

2. PB ZOOM（播放缩放）
3. 显示
4. 视频指示灯
5. 模式转换 （录像带/记忆棒）
6. DV插孔
7. DC插孔
8. ENTER（确认）按钮
9. MENU（菜单）拨盘
10. 扬声器
11. MENU（菜单）按钮

Right & Top View



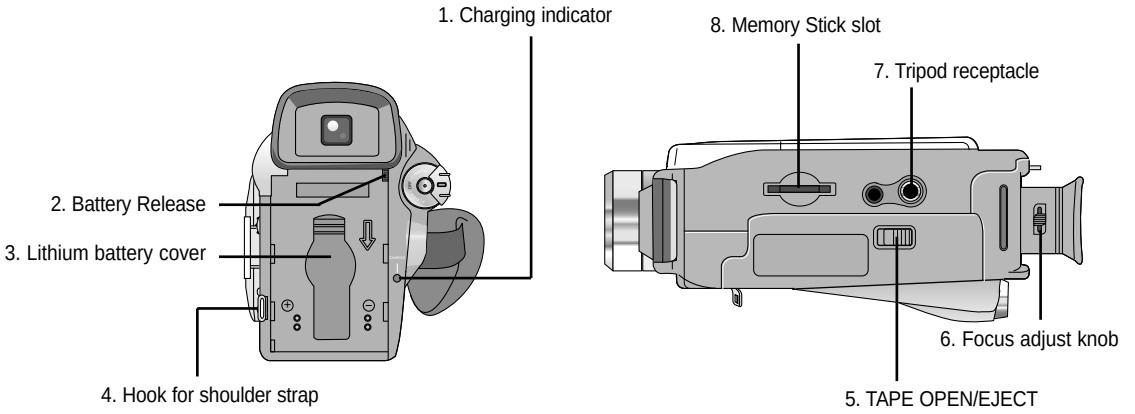
1. Zoom lever
2. PHOTO button (see page 65)
3. START/STOP button
4. Power switch (CAMERA or PLAYER)
5. Hook for handstrap
6. External MIC in
7. Audio/Video jack
8. S-VIDEO jack
9. USB jack
10. NIGHT CAPTURE switch
11. Slow shutter

右视图和顶视图

1. 变焦手柄
2. PHOTO（拍照）按钮（见65页）
3. START/STOP（开始/停止）按钮
4. 功能开关［CAMERA（摄像机）或PLAYER（放像机）］
5. 手带扣
6. 外置麦克风插孔
7. Audio/Video（音频/视频）插孔
8. S-视频插孔
9. USB接口
10. NIGHT CAPTURE（夜间拍摄）开关
11. 低速快门

Rear & Bottom View

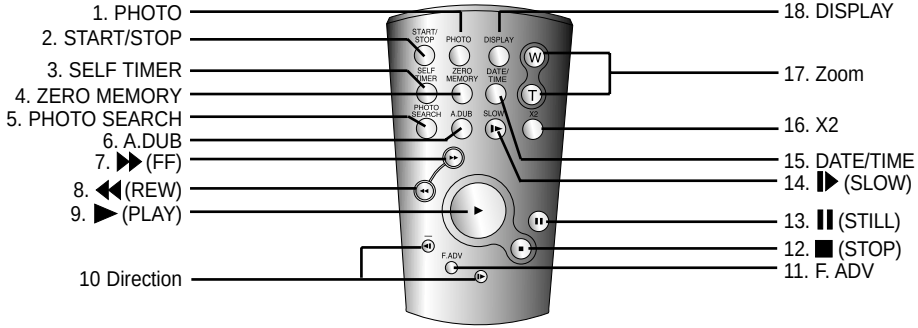
后视图和底视图



1. Charging indicator
2. Battery Release
3. Lithium battery cover
4. Hook for shoulder strap
5. TAPE OPEN/EJECT
6. Focus adjust knob
7. Tripod receptacle
8. Memory Stick slot

1. 充电指示灯
2. 电池舱开关
3. 锂电池盖
4. 肩带扣
5. TAPE OPEN/EJECT（录像带打开/退出）
6. 焦距调节手柄
7. 三角架插座
8. 记忆棒插槽

Remote control



1. PHOTO
2. START/STOP
3. SELF TIMER (see page 20)
4. ZERO MEMORY (see page 74)
5. PHOTO Search
6. A.DUB (see page 63)
7. ▶▶ (FF)
8. ◀◀ (REW)
9. ▶ (PLAY)
10. Direction (◀▌▌, ▌▌▶)
11. F. ADV (see page 73)
12. ■ (STOP)
13. ▌▌ (STILL)
14. ▌▶ (SLOW)
15. DATE/TIME
16. X2 (see page 73)
17. Zoom
18. Display

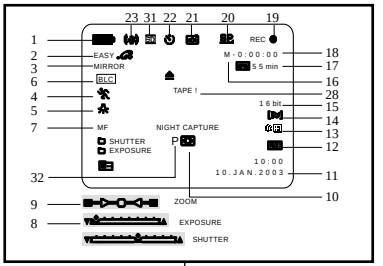
遥控器

1. PHOTO（拍照）
2. START/STOP（开始/停止）
3. SELF TIMER（自拍定时器）（见20页）
4. ZERO MEMORY（零点记忆）（见74页）
5. PHOTO SEARCH（拍摄记录搜索）
6. A.DUB（自动配音）（见63页）
7. ▶▶ (FF)（快进）
8. ◀◀ (REW)（快倒）
9. ▶ (PLAY)（播放）
10. 方向 (◀▌▌, ▌▌▶)
11. F. ADV（步进）（见73页）
12. ■ (STOP)（停止）
13. ▌▌ (STILL)（静止）
14. ▌▶ (SLOW)（慢放）
15. DATE/TIME（日期/时间）
16. X2 （见73页）
17. 变焦
18. 显示

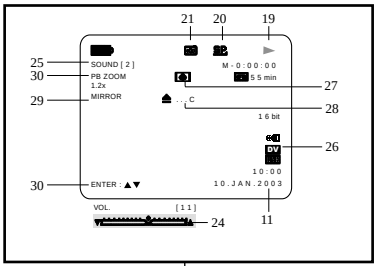
OSD (On Screen Display in CAMERA and PLAYER modes)

1. Battery level (see page 26)
2. Easy mode (see pages 59)
3. DSE (Digital Special Effects) mode (see page 48)
4. Program AE (see page 42)
5. White Balance mode (see page 44)
6. BLC (Back Light Compensation) (see page 61)
7. Manual focus (see page 60)
8. Shutter speed and EXPOSURE (see page 57)
9. Zoom position (see page 45)
10. NIGHT CAPTURE (see page 66)
11. DATE/TIME (see page 53)
12. USB
13. REMOCON
14. WIND CUT (see page 52)
15. Audio recording mode (see page 51)
16. Zero memory indicator (see page 74)
17. Remaining Tape (measured in minutes)
18. Tape Counter
19. Operating mode
20. Record speed mode
21. PHOTO mode
22. Self recording and waiting timer (see page 20)
23. DIS (see page 47)
24. Volume control (see page 34)
25. Audio playback channel
26. DV IN(DV data transfer mode) (VP-D23i/D24i only) (see page 79)
27. DEW (see page 7)
28. Message Line
29. PB DSE (see page 75)
30. PB ZOOM/ENTER (see page 76)
31. Video light (see page 68)
32. POWER NIGHT CAPTURE (see page 67)

OSD in CAMERA mode



OSD in PLAYER mode



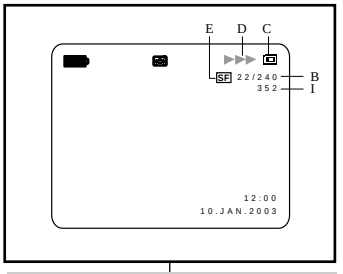
OSD（摄像机和放像机模式下的在屏显示）

1. 电池电量（见26页）
2. Easy（简易）模式（见59页）
3. DSE（Digital Special Effects，数字特殊效果）模式（见48页）
4. Program AE（程序自动曝光）(见42页)
5. White Balance（白平衡）模式（见44页）
6. BLC（Back Light Compensation，背光补偿）(见61页)
7. 手动调焦（见60页）
8. 快门速度和EXPOSURE（曝光）(见57页)
9. 变焦位置（见45页）
10. NIGHT CAPTURE（夜间拍摄）(见66页)
11. DATE/TIME（日期/时间）(见53页)
12. USB
13. REMOCON（遥控）
14. WIND CUT（风声消除）(见52页)
15. 自动录制模式（见51页）
16. 零点记忆指示器（见74页）
17. Remaining Tape（剩余的录像带）（以分钟计）
18. Tape Counter（录像带计数器）
19. 操作模式
20. 录制速度模式
21. PHOTO（拍照）模式
22. 自拍和等待定时器（见20页）
23. DIS（数字图像稳定器）(见47页)
24. 音量控制（见34页）
25. 音频播放频道
26. DV IN（DV数据传输模式）(仅限于VP-D23i/D24i)(见79页)
27. DEW（结露）(见7页)
28. Message Line（信息行）
29. PB DSE（播放数字特殊效果）(见75页)
30. PB变焦/确认（见76页）
31. 视频灯（见68页）
32. POWER NIGHT CAPTURE（超强夜间拍摄）(见67页)

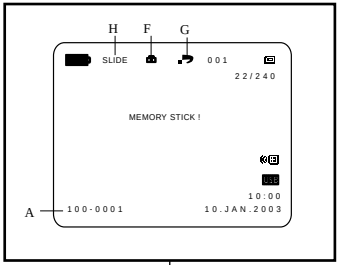
OSD (On Screen Display in M.REC/M.PLAY modes)

A. Folder number-file number (see page 85)
B. Image counter
   - Current still image/Total number of recordable still images.
C. CARD (MEMORY STICK) indicator
D. Image recording and loading indicator
E. Quality
F. ERASE PROTECTION indicator (see page 93)
G. Print Mark (see page 92)
H. SLIDE SHOW
I. MPEG4 Screen size

OSD in M.REC mode



OSD in M.PLAY mode



Turning the OSD on/off (On Screen Display)

● Turning OSD on/off

Press the DISPLAY button on the left side panel.

- Each press of the button toggles the OSD function on and off.
- When you turn the OSD off,
  In CAMERA mode: The STBY, REC, EASY.Q modes are always displayed on the OSD, even when the OSD is turned OFF and the key input is displayed for 3 seconds then turned off.
  In PLAYER mode: When you press any Function button, the function is displayed on the OSD for 3 seconds before it turns off.

● Turning the DATE/TIME on/off

- The DATE/TIME is not affected when the OSD function is switched ON or OFF.
- To turn the DATE/TIME on or off, access the menu and change the DATE/TIME mode. (see page 53)
- You may also use the Quick Menu to turn the DATE/TIME ON or OFF. (see page 55)
  (only in CAMERA/M.REC mode)

OSD（摄像机和放像机模式下的在屏显示）

A. 文件夹编号－文件号（参见85页）
B. 图像统计
   - 当前静止图像号/保存的所有静止图像数。
C. 记忆棒提示
D. 录制及加载图像提示
E. 图像质量
F. 防止意外擦除提示（参见93页）
G. 打印标记（参见92页）
H. 顺序播放
I. MPEG4屏幕尺寸

打开/关闭OSD（On Screen Display，在屏显示）

● 打开/关闭在屏显示

按下左侧面板上的DISPLYA（显示）按钮。

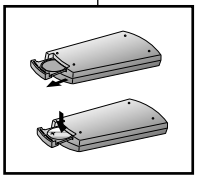
- 每次按下该按钮，都会在打开和关闭在屏显示功能之间进行一次切换。
- 当您关闭在屏显示
  CAMERA（摄像机）模式下：在屏显示总是显示STBY（待机）、REC（录制）、EASY.Q（简易）模式，甚至当在屏显示关闭时，键输入都会在3秒钟显示后关闭。
  PLAYER（放像机）模式下：在按下任何Function（功能）按钮时，在在屏显示关闭之前，该功能都会在在屏显示状态下显示3秒种。

● 打开/关闭DATE/TIME（日期/时间）

- 在打开或关闭在屏显示功能时，DATE/TIME（日期/时间）不会受到影响。
- 若要打开或关闭DATE/TIME（日期/时间），请访问菜单并改变DATE/TIME（日期/时间）模式。(见53页）
- 您也可以使用Quick Menu（快捷菜单）来打开/关闭DATE/TIME（日期/时间）。(见55页）
  (仅在CAMERA（摄像机）模式下)

How to use the Remote Control

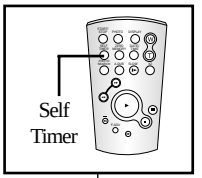
Battery Installation for the Remote Control



- You need to insert or replace the lithium battery when :
  - You purchase the camcorder.
  - The remote control doesn't work.
- Ensure that you insert the lithium cell correctly, following the + and - markings.
- Be careful not to reverse the polarity of the battery.

Self Record using the Remote Control

When you use the Self Timer function on the remote control, the recording begins automatically in 10 seconds.



1. Set the camcorder to CAMERA mode.

2. Press the SELF TIMER button until the appropriate indicator is displayed in the viewfinder.

3. Press the START/STOP button to start the timer.
   - After a 10 second wait, recording starts.
   - Press START/STOP again when you wish to stop recording.

如何使用遥控器

遥控器电池的安装

- 遇到下列情况之一，必须装入或更换锂电池：
  - 购买摄录一体机时；
  - 遥控器不能正常工作时。
- 按照＋和－标记，正确装入锂电池。
- 注意不要颠倒电池的极性。

使用遥控功能Self Record（自拍）

当使用遥控器上的Self Timer（自拍定时器）功能时，摄录一体机将在10秒后自动开始录制。

1. 把摄录一体机设置成CAMERA（摄像机）模式。

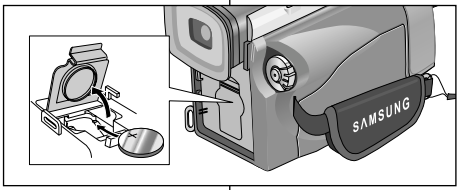
2. 按下SELF TIMER（自拍定时器）按钮，直到取景器中显示相应的指示标识。

3. 按下START/STOP（开始/停止）按钮启动定时器。
   - 等待10秒后，录制开始。
   - 希望停止录制时，再次按下START/STOP（开始/停止）按钮。

Lithium Battery Installation

- The lithium battery maintains the clock function and preset contents of the memory; even if the battery pack or AC power adapter is removed.
- The lithium battery for the camcorder lasts about 6 months under normal operation from the time of installation.
- When the lithium battery becomes weak or dead, the date/time indicator flashes for about 5 seconds when you set the power switch to CAMERA. When this occurs, replace the lithium battery with CR2025 type.

1. Open the Lithium battery cover from the camera.
2. Position the Lithium cell in the holder, with the positive (⊕) terminal face outward.
3. Close the lithium battery cover.



Reference

The lithium battery must be inserted in the correct direction.

Warning: Keep the LITHIUM BATTERY out of the reach of the children.
Should any battery be swallowed, consult a doctor immediately.

锂电池的安装

- 即使取下了电池组或AC电源适配器，锂电池仍可维持时钟功能，并预设存储器的内容。
- 在正常操作情况下，自安装时日起，摄录一体机的锂电池的使用寿命可以长达约6个月。
- 当锂电池电量不足或耗尽时，若把功能切换到CAMERA（摄像）时，日期/时间指示标识的闪烁时间约五秒钟。
  在这种情况下，请使用CR 2025型号电池更换锂电池。

1. 在摄橡机上打开锂电池盖。
2. 把锂电池装入电池座中，并让电池的正极（⊕）向外。
3. 合上锂电池盖。

注意

锂电池必须按正确方向插入。

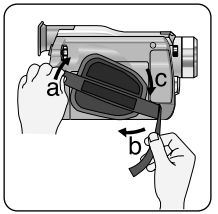
警告：请将锂电池置于儿童无法接触的地方。
如果误吞了锂电池，请立即找医生救治。

Adjusting the Hand Strap

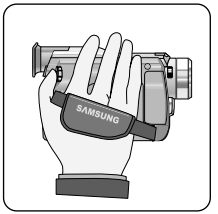
It is very important to ensure that the Hand strap has been correctly adjusted before you begin your recording.
The hand strap enables you to :

- Hold the camcorder in a stable, comfortable position.
- Press the Zoom and START/STOP button without having to change the position of your hand.

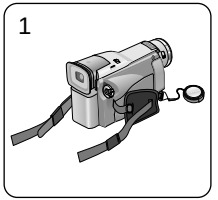
Hand strap

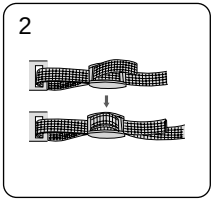


a. Pull open the Hand Strap cover and release the Hand Strap.
b. Adjust its length and stick it back onto the Hand Strap cover.
c. Close the Hand Strap cover again.



Shoulder Strap





The Shoulder Strap enables you to carry your camcorder around in complete safety.

1. Insert the end of strap into the Shoulder Strap hook on the camcorder.
   Insert the other end of strap into ring inside hand strap.
2. Thread each end into the buckle, adjust the length of the strap and then pull it tight in the buckle.

调整手带

在开始拍摄之前，重要的是要保证手带的正确调节。
手带使您能够：

- 稳定而舒适地握住摄录一体机。
- 不需改变手的位置，便可按下ZOOM（变焦）和START/STOP（开始/停止）按钮。

手带

a. 拉开手带护罩，松开手带。
b. 调节手带的长度，再将其粘回到手带护罩上。
c. 重新盖上手带护罩。

肩带

在出游时，您可以使用肩带方便而安全地携带摄录一体机。

1. 把肩带的末端插到摄录一体机机身上的肩带扣内。
   把肩带的另一端插入手持带内的环中。
2. 把各端穿入带扣中，调节带长，然后在带扣中将其拉紧。

Connecting a Power Source

There are two types of power source that can be connected to your camcorder.
- The AC Power Adapter and AC cord : used for indoor recording.
- The Battery Pack : used for outdoor recording.

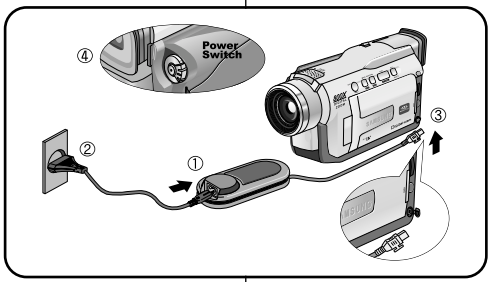
To use the AC Power adapter and DC Cable

1. Connect the AC Power adapter to the AC cord.
2. Connect the AC cord to a wall socket.

Reference

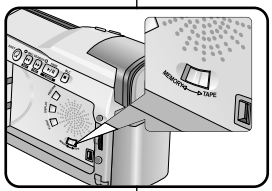
The plug and wall socket type may differ according to your resident country.

3. Connect the DC cable to the DC jack socket of the camcorder.
4. Set the camcorder to each mode by holding down the tab on the power switch and turning it to the CAMERA or PLAYER mode.



To select the CAMCORDER mode

- If you want to use this unit as a camcorder, set the mode switch to TAPE position.
- If you want to use this unit as a DSC (Digital Still Camera), set the mode switch to MEMORY STICK position.



连接电源

摄录一体机可以使用两种电源:
- 交流电源适配器和交流线：适用于室内拍摄。
- 电池组：适用于室外拍摄。

使用交流电源适配器和直流电源线

1. 将交流电源适配器与交流线相连。
2. 将交流电源适配器与墙上电源插座相连。

注意

按照居住区域的不同，插头和墙上的电源插座类型也可能会有所不同。

3. 将直流线与摄录一体机的直流插孔相连。
4. 按住功能开关的凸起，将功能开关推到CAMERA（摄像机）、PLAYER（放像机）模式，便可以为摄录一体机设置各个模式。

选择摄像机模式

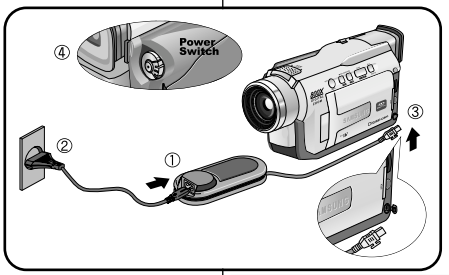
- 若您想使用摄像机功能，请将模式设置为录像带的位置。
- 若您想使用DSC（数码照相机）功能，请将模式设置为记忆棒位置。

Using the Lithium Ion Battery Pack

⌘ The amount of continuous recording time available depends on :
- The type and capacity of the battery pack you are using.
- How often the Zoom function is used.
  It is recommended that you have several batteries available.

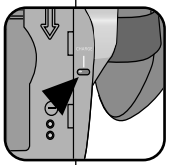
Charging the Lithium Ion Battery Pack

1. Attach the battery pack to the camcorder.
2. Connect the AC Power adapter to an AC cord and connect the AC cord to a wall socket.
3. Connect the DC cable to the DC jack socket on the camcorder.
4. Turn the Camera power switch to off, and the charging indicator will start to flash, showing that the battery is charging.



Blinking time	Charging rate
Once per second	Less than 50%
Twice per second	50% ~ 75%
Three times per second	75% ~ 90%
Blinking stops and stays on	90 ~ 100%
On for a second and off for a second	Error - Reset the battery pack and the DC cable

5. When the battery is fully charged, disconnect the battery pack and the AC Power adapter from the camcorder.
   ■ Even with the power switched off, the battery pack will still discharge if it is left connected to the camcorder.



Reference

- The battery pack may be charged a little at the time of purchase.
- To prevent reduction in the life and capacity of the battery pack, always remove it from the camcorder after it is fully charged.

使用锂离子电池组

⌘ 连续拍摄时间的长短取决于:
- 所使用的电池组的型号和容量
- 使用Zoom（变焦）拍摄功能的频繁程度。
  建议您准备几个备用电池组。

对锂离子电池组充电

1. 将电池组安装到摄录一体机内。
2. 将交流电源适配器与交流电源线相连，并将交流电源线插入到墙上电源插座中。
3. 将直流电源线与摄录一体机的直流插孔相连。
4. 关闭摄录一体机的功能开关，充电指示灯开始闪烁，表明电池正在充电。

闪烁次数	充电率
1秒钟1次	低于50%
1秒钟2次	50% ~ 75%
1秒钟3次	75% ~ 90%
闪烁停止，充电指示灯一直亮着	90 ~ 100%
亮1秒，灭1秒	故障 - 重装电池组和直流电源线。

5. 在充电完毕时，从摄录一体机上取下交流电源适配器和电池。
   ■ 如果电池组仍与机身相连，即使电源开关已经断开，电池仍会放电。

注意

- 在购买电池组时，电池组可能已经充了一些电。
- 为了防止电池组寿命和容量下降，在充满电后，应将电池组从摄录一体机中取出。

Using the Lithium Ion Battery Pack

Table of continuous recording time based on model and battery type.

- ⌘ If you close the LCD screen, it switches off and the viewfinder switches on automatically.
- ⌘ The continuous recording times given in the table above are approximations.
  Actual recording time depends on usage.

Time / Battery	Charging time	Continuous recording time	
		LCD ON	VIEWFINDER ON
SB-L110	Approx. 2hr	Approx. 1hr 30min	Approx. 2hr
SB-L220	Approx. 3hr 30min	Approx. 3hr 10min	Approx. 4hr 10min

Reference

- The battery pack should be recharged in an environment of between 32°F (0°C) and 104°F (40°C).
- The battery pack should never be charged in a room temperature that is below 32°F (0°C).
- The life and capacity of the battery pack will be reduced if it is used in temperatures below 32°F (0°C) or left in temperatures above 104°F (40°C) for a long period, even when it is fully recharged.
- Do not put the battery pack near any heat source (fire or flames, for example).
- Do not disassemble, process, pressure, or heat the Battery Pack.
- Do not allow the + and - terminals of the battery pack to be short-circuited.
  It may cause leakage, heat generation, induce fire and overheating.

使用锂离子电池组

基于不同电 池型号和类型的连 续录制时间表。

- ⌘ 如果合上 液晶显示屏，显示屏将 自动关闭且取景器 会自动开启。
- ⌘ 本表给出 的连续录制时间仅 为一近似值 。
  实际的录 制时间与使用有关 。

时间 / 电池	充电时间	连续录 像时间	
		LCD（液晶显示屏）开启	VIEWFINDER（取景器）开启
SB-L110	约2小时	约1 小时30分钟	约2 小时
SB-L220	约3小时30分钟	约3 小时10分钟	约4 小时10分钟

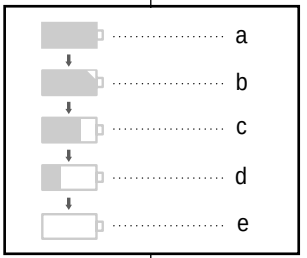
注意

- 电池组应 该在室温32°F（0°C）到104°F（40°C）的环境下 充电。
- 请勿在室 温低于32°F(0°C)的状态下 更换电池。
- 如果在温 度低于32°F （0°C）或高于104°F （40°C）的条件下 长期使用电池组，即使是完 全充足电，电池组寿 命和容量也会降低。
- 不要将电 池组放置在靠近热 源处（例如火或 火焰）。
- 不要分解 、处理、挤压，或者加热 锂电池组 。
- 不允许电 池组的+和-极短路 。
  这会引起 漏电、发热、起火和过 热。

Preparation

Battery level display

- The battery level display indicates the amount of power remaining in the battery pack.



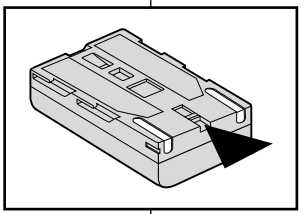
a. Fully charged
b. 20~40% used
c. 40~80% used
d. 80~95% used
e. Completely used (flickers)
(The camcorder will turn off soon,
change the battery as soon as possible)

⌘ Please refer to the table on page 25 for approximate continuous recording times.

⌘ The recording time is affected by environmental temperature and conditions.
The recording time becomes very short in a cold environment.
The continuous recording times in the operating instructions are measured using a fully charged battery pack at 77°F(25°C).
As the environmental temperature and conditions may differ when you actually use the camcorder, the remaining battery time may not be the same as the approximate continuous recording times given in these instructions.

Tips for Battery Identification

A charge mark is provided on the battery pack to help you remember whether it has been charged or not.
Two colours are provided (red and grey)-you may choose which one indicates charged and which indicates discharged.



准备

电池电量显示标识

- 电池电量显示标识可指示电池组的剩余电量。

a. 已充满电
b. 已使用20~40%
c. 已使用40~80%
d. 已使用80~95%
e. 电能完全用尽（闪烁）
（摄录一体机即将被关闭，请尽快充电）

⌘ 有关连续录制的时间，请参见第25页中近似的时间表。

⌘ 录制时间受环境温度和条件的影响。
在低温环境下，拍摄时间将变得十分短。
本使用说明书中的连续拍摄时间是在使用完全充足电的电池，且在77°F（25°C）的条件下测量的。(25°C).
由于您在使用摄录一体机时，实际的环境温度和条件有可能各异，因此实际的连续拍摄时间也会不同于表中给出的近似时间。

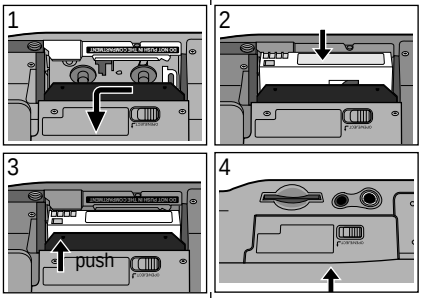
电池识别窍门

电池组上提供了充电标记，它可以协助您辨别电池是否已经充过电。
提供两种颜色（红色和灰色）——您可以选择任意一种颜色来表示其已充电和已放电。

Inserting and Ejecting a Cassette

- When inserting a tape or closing a cassette holder, do not apply excessive force.
  This may cause a malfunction.
- Do not use any tapes other than Mini DV cassettes.

1. Connect a power source and slide the TAPE OPEN/EJECT switch and open the cassette door.
   - The cassette holding mechanism rises automatically.
2. Insert a tape into the cassette holder with the tape window facing outward and the protection tab toward the top.
3. Press the area labelled PUSH on the cassette holding mechanism until it clicks into place.
   - The cassette is loaded automatically.
4. Close the cassette door.
   - Close the door completely until you can hear a “click”.



Reference

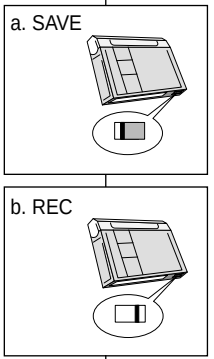
When you have recorded something that you wish to keep, you can protect it so that it will not be accidentally erased.

a. Protecting a tape :
Push the safety tab on the cassette so that the hole is uncovered.

b. Removing the tape protection :
If you no longer wish to keep the recording on the cassette, push the write-protect tab back so that it covers the hole.

• How to keep a tape

a. Avoid places with magnets or magnetic interference.
b. Avoid humidity and dust prone places.
c. Keep the tape in an upright position and avoid storing it in direct sunlight.
d. Avoid dropping or knocking your tapes.



插入和退出盒带

- 插入录像带或关闭盒带带舱时，不得用力过猛，否则有可能会导致故障。
- 不得使用不是微型数字视频（DV）盒带的录像带。

1. 连接电源并推动TAPE OPEN/EJECT（录像带打开/退出）开关，打开带舱盖。
   - 盒带架机构将自动抬起。
2. 将录像带插入盒带架，并让录像带观察窗朝外和写保护标签朝上。
3. 推动盒带架机构上的PUSH（推）标记，直到盒带架咔哒到位。
   - 盒带将自动装上。
4. 关上盒带舱门。
   - 完全关闭盒带舱门，直到听到内部“咔哒”一声为止。

注意

当您已经录好一盒希望保存的录像带时，请将它其设置为保护状态，以防止其中的内容被意外地擦除掉。

a. **保护录像带**：
推动录像带上的安全标签以便小孔不被盖住。

b. **取消录像带的写保护**：
如果不想保存录像带上的内容，请推回写保护标签，盖住小孔。

• **如何保存录像带**

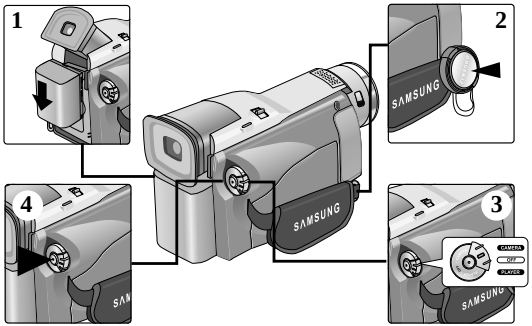
a. 不得将其与磁体一同放置，也不得将其放置在磁场中。
b. 不得将其放在湿度高、尘土多的地方。
c. 请将录像带直立放置，并且让其远离阳光的直射。
d. 不得让盒式录像带从空中跌落或受到敲击。

Basic Recording

基本拍摄技术

Making your First Recording

1. Connect a Power source to the camcorder. (see page 23)
   (A battery pack or a AC power adapter)
   - Insert a cassette. (see page 27)
2. Remove the LENS CAP and hook it onto the hand strap.
3. Set the power switch to the CAMERA position.
   - Open the LCD monitor.
   - Set the mode switch to the TAPE position.
     Make sure that STBY is displayed.
   - If the protection tab of the cassette is open, STOP and PROTECTION! will be displayed.
   - Make sure the image you want to record appears in the LCD monitor or viewfinder.
   - Make sure the battery level indicates that there is enough remaining power for your expected recording time.
4. To start recording, press the START/STOP button.
   - REC is displayed in the LCD.
     To stop recording, press the START/STOP button again.
   - STBY is displayed in the LCD.



首次拍摄

1. 将摄录一体机与电源相连。
   （见23页）（电池组或交流电源适配器）
   - 插入盒带。（见27页）
2. 打开LENS CAP（镜盖），并将其悬挂到手带上。
3. 将功能切换到CAMERA（摄像机）位置。
   - 打开LCD显示器。
   - 将模式按钮设置成录像。
     保证显示STBY（待机）。
   - 如果盒带的写保护标签处于开启状态的话，STOP和PROTECTION！都将会显示。
   - 请确保您要拍摄的图像已经出现在LCD显示器或取景器上。
   - 确保电池电量指示灯显示有足够的电量用于摄像。
4. 如要开始拍摄，请按下START/STOP（开始/停止）按钮。
   - 液晶显示屏上显示REC（摄像）标识。
     如要停止摄像，再次按下START/STOP（开始/停止）按钮即可。
   - 液晶显示屏上将显示STBY（待机）标识。

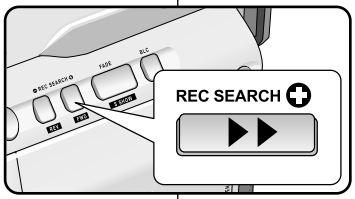
ENGLISH

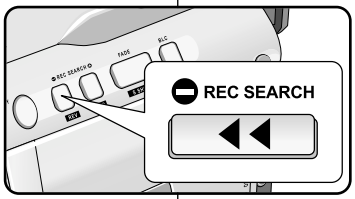
Basic Recording

When a cassette is loaded and the camcorder is left in the STBY mode for more than 5 minutes without being used, it will switch off automatically.
To use it again, push the START/STOP button or set the Power switch to OFF and then back to CAMERA.
This Auto Power off feature is designed to save battery power.

Record Search (REC SEARCH)

- You can view a recording using the REC SEARCH +, – function in STBY mode. REC SEARCH – enables you to play the recording backwards and REC SEARCH + enables you to play it forwards, for as long as you keep each button pressed down.
- If you press the REC SEARCH – button in STBY mode, your camcorder will play in reverse for 3 seconds and return to the original position automatically.





Reference

Mosaic shaped distortion may appear on the screen while in Record Search mode.

中文

基本拍摄技术

当装入盒带时，摄录一体机处于STBY（待机）模式5分钟而未使用，机器就会自动断电。
如需再次使用，则请推动START/STOP（开始/停止）按钮或将Power（功能）开关切换到OFF（关闭），然后再切换回CAMERA（摄像机）位置。
这种自动关闭电源功能是为了节省电池电量而设计的。

拍摄记录搜索（REC SEARCH）

- 您可以在STBY（待机）模式时，使用REC SEAERCH +、– 功能来查看记录。只要您按下相应的键，机器便会按您所需的方向播放拍摄记录，其中REC SEARCH – 可以向前播放，而REC SEARCH + 则可以向后播放。
- 如果在STBY（待机）模式下按REC SEARCH –（向后搜索拍摄记录）按钮，摄录一体机将向后播放3秒钟，再自动回到原来的位置。

注意

在REC SEAERCH（拍摄记录搜索）模式下，屏幕上会出现马赛克失真。

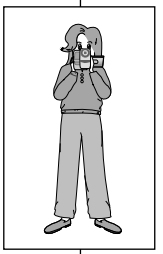
Basic Recording

基本拍摄技术

Hints for Stable Image Recording

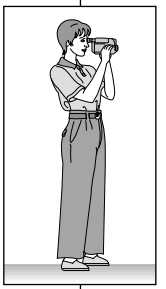
- While recording, it is very important to hold the camcorder correctly.
- Fix the LENS cap firmly by clipping it to the hand strap. (refer to the figure)

Recording with the LCD monitor



1. Hold the camcorder firmly using the hand strap.
2. Place your right elbow against your side.
3. Place your left hand under or beside the LCD to support and adjust it.
   Do not touch the built-in microphone.
4. Choose a comfortable, stable position for the shots that you are taking.
   You can lean against a wall or on a table for greater stability.
   Do not forget to breathe gently.
5. Use the LCD frame as a guide to determine the horizontal plane.
6. Whenever possible, use a tripod.

Recording with the Viewfinder



1. Hold the camcorder firmly using the hand strap.
2. Place your right elbow against your side.
3. Place your left hand under the camcorder to support it.
   Be sure not to touch the built-in microphone.
4. Choose a comfortable, stable position for the shots that you are taking.
   You can lean against a wall or on a table for greater stability.
   Do not forget to breathe gently.
5. To view an object through the viewfinder, pull it out until you hear the 'click' sound.
   Excessive force may cause damage to the viewfinder.
6. Place your eye firmly against the viewfinder eyecup.
7. Use the viewfinder frame as a guide to determine the horizontal plane.
8. Whenever possible, use a tripod.

拍摄稳定图像须知

- 拍摄时，正确握持摄录一体机非常重要。
- 将镜盖锁在手带上牢固地固定住。
  （参见图）

使用LCD显示器拍摄

1. 使用手带紧紧地握住摄录一体机。
2. 将右肘贴紧身体。
3. 将左手放在液晶显示屏下方或侧面，支撑并调整液晶显示屏。
   不得触及内置话筒。
4. 选择一个舒适稳定的姿势进行拍摄。
   您可以靠在墙壁或桌面上，以提高更大的稳定性。
   在拍摄时，请保持均匀而柔和的呼吸。
5. 将液晶显示屏框用作确定水平面的基准。
6. 尽可能地使用三角架。

使用取景器拍摄

1. 使用手带紧紧地握住摄录一体机。
2. 将右肘贴紧身体。
3. 将左手放在摄录一体机下方支撑机器。
   不得触及内置话筒。
4. 选择一个舒适稳定的姿势进行拍摄。
   您可以靠在墙壁或桌面上，以提高稳定性。
   在拍摄时，请保持均匀柔和的呼吸。
5. 若要通过取景器观察物体，请将取景器拔出直到听到"咔哒"声为止。用力过度将会损坏取景器。
6. 将眼睛紧贴取景器的眼罩。
7. 将取景器的框用作确定水平面的基准。
8. 尽可能地使用三角架。

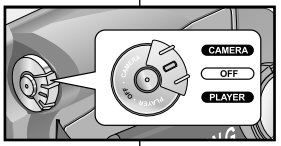
Basic Recording

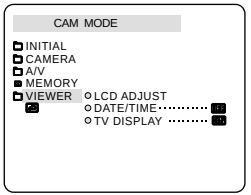
基本拍摄技术

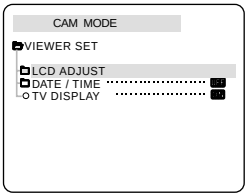
Adjusting the LCD

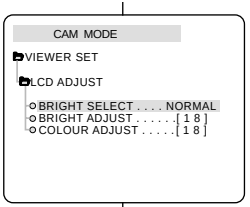
- Your camcorder is equipped with a 2.5 inch colour Liquid Crystal Display(LCD) screen, which enables you to view what you are recording or playing back directly.
- Depending on the conditions under which you are using the camcorder (indoors or outdoors for example), you can adjust ;
  - BRIGHT SELECT
  - BRIGHT ADJUST
  - COLOUR ADJUST

1. Set the POWER switch to CAMERA position.
   - In the PLAYER mode, you may only setup the LCD while the tape is playing.
2. Open the LCD screen, and the LCD switches on.
3. Press the MENU button.
4. Turn the MENU DIAL so that VIEWER is highlighted and then press the ENTER button.
5. Turn the MENU DIAL so that LCD ADJUST is highlighted.
6. Press the ENTER button to enter the sub-menu.
7. Turn the MENU DIAL so that it highlights the menu item you want to adjust (BRIGHT SELECT, BRIGHT ADJUST, COLOUR ADJUST).









调整液晶显示屏

- 摄录一体机装备有一个2.5英寸的彩色液晶显示屏，它能够帮助您直接观看正在拍摄的图像或重放的图像。
- 根据您使用摄录一体机时的条件（例如，室内或室外），您可以进行以下调整：
  - BRIGHT SELECT（亮度选择）
  - BRIGHT ADJUST（亮度调整）
  - COLOUR ADJUST（颜色调整）

1. 将POWER（功能）开关切换到CAMERA（摄像机）位置。CAMERA（摄像机）位置。
   - 在PLAYER（播放机）模式下，只有在播放录像带时，才能设置液晶显示屏。
2. 打开液晶显示屏，并将开关拨至LCD（液晶显示）处。
   LCD（液晶显示）处。
3. 按MENU（菜单）按钮。
4. 转动MENU DIAL（菜单拨盘），以便VIEWER（取景器）高亮显示，然后按下ENTER（确认）按钮。
5. 转动菜单拨盘以便LCD ADJUST（液晶显示屏调节）高亮显示。
6. 按下ENTER（确认）按钮，进入子菜单。
7. 转动MENU DIAL（菜单拨盘），让您希望调节的菜单项高亮显示［BRIGHT SELECT（亮度选择）、BRIGHT ADJUST（亮度调整）、COLOUR ADJUST（颜色调整）］。

8. Press the ENTER button again.
   - You may select NORMAL or SUPER in the BRIGHT SELECT feature and press the ENTER button to save the setting.
   - Use the MENU DIAL to adjust the value of BRIGHT ADJUST and COLOUR ADJUST.
   - You can set values for BRIGHT ADJUST between 00 ~ 35 and COLOUR ADJUST between 00 ~ 35.

9. Press the MENU button to finish the setting.

Using the VIEWFINDER

⌘ The VIEWFINDER will not work when the LCD is open.

Adjusting the Focus

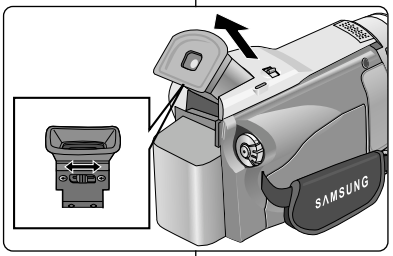
Use the focus adjustment knob of the VIEWFINDER to focus the picture. (refer to figure)

8. 再次按下ENTER（确认）按钮。
   - 可在BRIGHT SELECT（亮度选择）功能中选 择NORMAL（标准）、SUPER（超亮）并按ENTER（确认）按钮以保 存设置。
   - 使用MENU DIAL（菜单拨盘）调节BRIGHT ADJUST（亮度调整）和COLOUR ADJUST（颜色调整）值。
   - 可将BRIGHT ADJUST（亮度调整）值设置在00 ~ 35之间，COLOUR ADJUST（颜色调整）值设置在 00 ~ 35之间。

9. 按下MENU（菜单）按钮以完 成设置。

使用VIEWFINDER（取景器）

⌘ 只要液晶 显示屏处于开启状 态，取景器就 不能工作。



调节焦距

使用取景 器的焦距调节旋钮 对图像进行聚集。（请参见图 示）

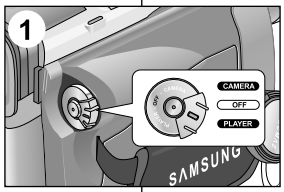
Basic Recording

基本拍摄技术

Playing back a tape you have recorded on the LCD

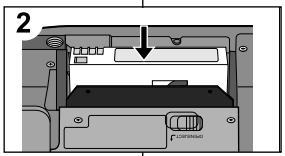
- You can monitor the playback picture on the LCD monitor.
- Make sure that the battery pack is in place.

1. Hold down the power switch tab and turn it to the PLAYER position.

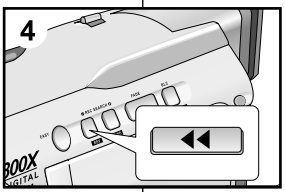


2. Insert the tape you wish to view. (see page 27)

3. Open the LCD screen.
   Adjust the angle of the LCD screen and set the brightness or colour if necessary.



4. Press the ◀◀ (REW) button to rewind the tape to the starting point.
   - To stop rewinding, press the ■ (STOP) button.
   - The camcorder stops automatically after rewinding is complete.



5. Press the ▶/II (PLAY/STILL) button to start playback.
   - You can view the picture you recorded on the LCD.
   - To stop the PLAY operation, press the ■ (STOP) button.

Reference

- You can also view the picture on a TV screen, after connecting the camcorder to a TV or VCR. (see page 70)
- Various functions are available in playback mode. (see page 72)

在液晶显示屏上播放拍摄的录像带

- 您可以从LCD显示器上观看播放的图像。
- 请确保已将电池组安装到位。

1. 按下电源开关上的突起，将电源开关切换到PLAYER（放像机）位置。

2. 插入要观看的录像带。（见27页）

3. 打开液晶显示屏。
   调节液晶显示屏的角度并根据需要设置亮度或颜色。

4. 按下◀◀（REW）（快倒）按钮，将录像带倒回到起始点。
   - 如需停止快倒，按下■（STOP）（停止）按钮即可。
   - 在倒带时，若盒带到达其终端位置，则摄录一体机将自动停止。

5. 按下▶/II（PLAY/STILL）（播放/静止）按钮，开始播放。
   - 您可以在液晶显示屏上观看到已摄制的图像。
   - 如要停止PLAY（播放）操作，按下■（STOP）（停止）按钮即可。

注意

- 在将摄录一体机与电视机或录像机相连后，您也还可在电视机屏幕上观看图像。（见70页）
- 在播放模式下，您可使用各种功能。（见72页）

Adjusting the LCD during PLAY

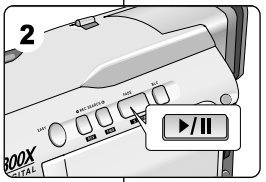
- ⌘ You can adjust the LCD during playback.
- ⌘ The adjustment method is the same procedure as used in CAMERA mode. (see page 31)

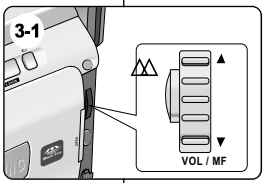
Controlling Sound from the Speaker

The Speaker works in PLAYER mode only.

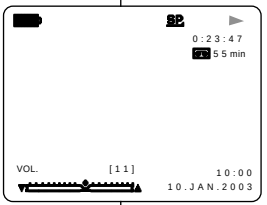
■ When you use the LCD screen for playback, you can hear the recorded sound from he built-in Speaker.
- Follow the instructions below to decrease or mute speaker volume in the PLAYER mode.
- Take the following steps to lower the volume or mute the sound while playing a tape on the camcorder.

1. Set the power switch to PLAYER mode.
2. Press ▶/II (PLAY/STILL) to play the tape.
3. When you hear sounds once the tape is in play, use the MENU DIAL to adjust the volume.
   ■ A volume level display will appear on the LCD. Levels may be adjusted from anywhere between 00 to 19 and you will not hear any sound when the volume is set on 00.
   ■ If you close the LCD while playing, you will not hear sound from the speaker.





<3-2>



Reference

■ When the cable is connected to the A/V jack, you cannot hear sound from the camcorder speaker and cannot adjust the volume.
■ But, even if cable is connected to the A/V jack, you can hear sound from the camcorder speaker when AV IN/OUT MODE on MENU is set to AV IN MODE. (VP-D23i/D24i only)
■ You can hear sound from camcorder speaker by removing the connected cable from the A/V jack

在PLAY（播放）期间调节液晶显示屏

- ⌘ 您可在播放过程中调整液晶显示屏。
- ⌘ 调整方法与CAMERA（摄像机）模式下的操作相同（见31页）。

控制扬声器的声音

扬声器仅在PLAYER（放像机）模式下工作。

■ 当您在播放中使用液晶显示屏时，还可以用内置Speaker（扬声器）听取录制的声音。
- 按照以下说明在PLAYER（放像机）模式下降低扬声器音量或使其处于静音状态。
- 在播放摄像机中的录像带时，请采取以下步骤降低音量或使其处于静音状态。

1. 将电源开关切换到PLAYER（放像机）模式。
2. 按下▶/II（PLAY/STILL）（播放/静止）以播放录像带。
3. 在听到播放录像带的声音时，请使用MENU DIAL（菜单拨盘）调节音量。

■ 液晶显示屏上将会出现音量显示器。您可以在00到19之间调节音量。在音量被置于00时，您将不会听到任何声音。
■ 如果在播放时关闭了液晶显示屏，就不会再听到扬声器的声音。

注意

■ 当电线接到A/V插孔时，您将听不到来自扬声器的声音，并且不能调节音量。
■ 但是，当MENU（菜单）上的AV IN/OUT MODE（音频视频输入/输出模式）被设置成AV IN（音频视频输入）时，即使电线已经连入A/V插孔，您也不可能听到声音。（仅限于VP-D23i/D24i）
■ 您可以将连接线从A/V插孔拔出以听取扬声器的声音。

Advanced Recording

高级拍摄技巧

Use of various Functions

● Setting menu items

MENU	SUB MENU	Available mode			
		CAMERA	PLAYER	Memory REC.	Memory PLAY
INITIAL	CLOCK SET	✔	✔	✔	✔
	WL.REMOTE	✔	✔	✔	✔
	BEEP SOUND	✔	✔	✔	✔
	SHUT.SOUND		✔	✔	
	DEMO	✔			
CAMERA	PROGRAM AE	✔			
	WHT. BALANCE	✔		✔	
	D. ZOOM	✔			
	DIS	✔			
	DSE SELECT	✔			
A/V	REC MODE	✔	✔		
	PHOTO SEARCH		✔		
	PHOTO COPY		✔		
	AUDIO MODE	✔	✔		
	AUDIO SELECT		✔		
	WIND CUT	✔	✔		
	PB DSE		✔		
	AV IN/OUT (VP-D23i/D24i only)		✔		
MEMORY	M.PLAY SELECT				✔
	PHOTO QUALITY		✔	✔	
	MPEG4 SIZE			✔	
	PRINT MARK				✔
	PROTECT				✔
	FILE NO		✔	✔	✔
	DELETE				✔
	FORMAT				✔
VIEWER	LCD ADJUST	✔	✔	✔	✔
	DATE/TIME	✔	✔	✔	✔
	TV DISPLAY	✔	✔	✔	✔

● Set the camcorder to CAMERA or PLAYER mode and M.REC or M.PLAY mode

1. Press the MENU button.
   The MENU OSD is displayed. The cursor (HIGHLIGHT) indicates the feature you are currently adjusting.
2. Use the MENU DIAL and press the ENTER button on the left side panel to select and activate the item.
3. You can exit the menu mode by pressing the MENU button.

使用各种功能

● 设置菜单项

菜单	子菜单	可选模式			
		CAMERA（摄像机）	PLAYER（放像机）	Memory REC.	Memory PLAY
INITIAL（初始）	CLOCK SET(时钟设置)	✔	✔	✔	✔
	WL.REMOTE(遥控)	✔	✔	✔	✔
	BEEP SOUND	✔	✔	✔	✔
	SHUT.SOUND		✔	✔	
	DEMO(演示)	✔			
CAMERA（摄像机）	PROGRAM AE（程序自动曝光）	✔			
	WHT.BALANCE（白平衡）	✔		✔	
	D.ZOOM（数字变焦）	✔			
	DIS（数字图像稳定器）	✔			
	DSE SELECT（数字特殊效果选择）	✔			
A/V（音频/视频）	REC MODE(拍摄模式)	✔	✔		
	PHOTO SEARCH(拍照记录搜索)		✔		
	PHOTO COPY		✔		
	AUDIO MODE(音频选择)	✔	✔		
	AUDIO SELECT(音频选择)		✔		
	WIND CUT(风声消除)	✔	✔		
	PB DSE(播放数字特殊效果)		✔		
	AV IN/OUT (只限于VP-D23i/D24i)		✔		
MEMORY	M.PLAY SELECT				✔
	PHOTO QUALITY		✔	✔	
	MPEG4 SIZE			✔	
	PRINT MARK				✔
	PROTECT				✔
	FILE NO		✔	✔	✔
	DELETE				✔
	FORMAT				✔
VIEWER（取景器）	LCD ADJUST(LCD 调整)	✔	✔	✔	✔
	DATE/TIME(日期/时间)	✔	✔	✔	✔
	TV DISPLAY(TV显示)	✔	✔	✔	✔

● 将摄录一体机设置为CAMERA（摄像机）或PLAYER（放像机）模式

1. 按下MENU（菜单）按钮。
   之后，将显示MENU OSD（菜单在屏显示）。
   光标（ 高亮显示 ）将为您指示当前正在调节的功能。
2. 使用MENU DIAL（菜单拨盘）并按下左侧面板的ENTER（确认）按钮，以选择和激活该选项。
3. 您可通过按MENU（菜单）按钮，退出菜单模式。

Advanced Recording

● Availability of functions in each mode

Requested Mode / Operating Mode	Digital functions				Digital special effects	NIGHT CAPTURE
	DIS	D.ZOOM	PHOTO (TAPE)	SLOW SHUTTER		
DIS		O	O	△	O	O
D.ZOOM	O		O	*△	O	O
PHOTO	×	×		×	×	O
SLOW SHUTTER	△	×	O		O	O
Digital Special Effects	O	O	O	O		△
NIGHT CAPTURE	O	O	O	O	×	

O : The requested mode will work in this operating mode.
× : You can not change the requested mode.
△ : The operating mode will be released and the requested mode will work.
* : The operating mode will be released and the requested mode will work. (the data during the operating mode will be backed up)

Reference

- When a menu item on the LCD is marked with an [X], that item cannot be activated.
- When you select an item that cannot be changed, an error message will be displayed.

高级拍摄技巧

● 各个模式下的功能实用性

要求的模式 / 操作模式	数字功能				数字特殊效果	NIGHT CAPTURE
	DIS	D.ZOOM	PHOTO (TAPE)	SLOW SHUTTER		
DIS（数字图像稳定器）		O	O	△	O	O
D.ZOOM（数字变焦）	O		O	*△	O	O
PHOTO（拍照）	×	×		×	×	O
SLOW SHUTTER（低速快门）	△	×	O		O	O
数字特殊效果	O	O	O	O		△
NIGHT CAPTURE(夜间拍摄)	O	O	O	O	×	

O ：要求的模式将在操作模式下运行。
× ：您不能改变要求的模式。
△ ：操作模式将退出，并运行要求模式。
* ：操作模式将被释放，并运行要求模式。
（仅次于运行模式下的数据将被备份）

注意

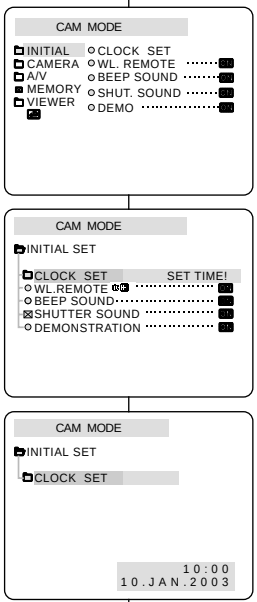
- 如果在液晶显示屏上的某个菜单项标有 [X]，则该项不能被激活。
- 如果您选择一个不能更改的项，则会显示错误信息。

Advanced Recording

● CLOCK SET

- ⌘ CLOCK setup works in CAMERA, PLAYER, M.REC and M.PLAY modes.
- ⌘ The DATE/TIME is automatically recorded onto a tape. Before recording, please set the DATE/TIME.

1. Press the MENU button.
   - ■ The menu list will appear.
2. Turn the MENU DIAL to highlight INITIAL and press the ENTER button.
3. Use the MENU DIAL to select CLOCK SET from the submenu.
4. Press the ENTER button to enter SETTING mode.
   - ■ A blinking item indicates the item to be changed. The year will blink first.
5. Using the MENU DIAL, change the year setting.
6. Press the ENTER button.
   - ■ The month will blink.
7. Using the MENU DIAL, change the month setting.
8. Press the ENTER button.
   - ■ The day will blink.
9. You can set the day, hour and minute following the same procedure for setting the year and month.
10. Press the ENTER button after setting the minutes.
    - ■ The word COMPLETE! will appear, and a few seconds later, the menu screen will automatically return to the sub menu.
11. To exit, press the MENU button.



高级拍摄技巧

● CLOCK SET (时钟设置)

- ⌘ 可以在CAMERA（摄像机）、PLAYER（放像机）、M.REC（照片录制）、M.PLAY（照片播放）模式下使 用CLOCK（时钟）设置功能。
- ⌘ DATE/TIME（日期/时间）会自动录 制到录像带上。在录制之 前，请设置DATE/TIME（日期/时间）。

1. 按MENU（菜单）按钮。
   - ■ 之后，会出现菜 单列表。
2. 拨动MENU DIAL（菜单拨盘）以便高亮 显示INITIAL（初始）并按下ENTER（确认）按钮。
3. 使用MENU DIAL（菜单拨盘）从子菜单中选择CLOCK SET（时钟设置）。
4. 按ENTER（确认）按钮进入SETTING（设置）模式。
   - ■ 闪烁的项 即为可以更改的项。首先从年 份开始闪烁。
5. 使用MENU DIAL（菜单拨盘），改变年份 设置。
6. 按ENTER（确认）按钮。
   - ■ 月份开始 闪烁。
7. 使用MENU DIAL（菜单拨盘），改变月份 设置。
8. 按ENTER（确认）按钮。
   - ■ 日期开始 闪烁。
9. 可按照设 置年份和月份相同的步骤设置日期、小时和分 钟。
10. 请在设置 完分钟后按ENTER（确认）按钮。
    - ■ 之后，会出现“COMPLETE！”（完成！）的字样，几秒种后，菜单屏幕 将自动返回到子菜单。
11. 若要退出，请按MENU（菜单）按钮。

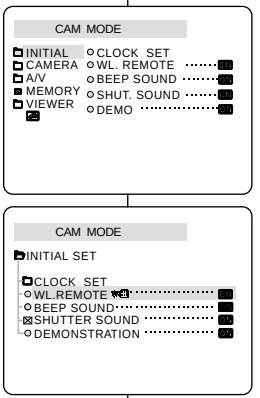
ENGLISH

Advanced Recording

● REMOCON

- ⌘ The REMOCON function works in CAMERA, PLAYER, M.REC, M.PLAY modes.
- ⌘ The REMOCON option allows you to enable or disable the remote control for use with the camcorder.

1. Press the MENU button.
   - ■ The menu list will appear.
2. Turn the MENU DIAL to highlight INITIAL and press the ENTER button.
3. Use the MENU DIAL to select WL.REMOTE from the submenu.
4. Press the ENTER button to enable or disable the remote control.
   The setting switches between ON/OFF each time you press the ENTER button.
5. To exit, press the MENU button.
   - ■ If you set the remote to OFF in the menu and try to use it, the remote icon will the remote control icon will blink for 3 seconds and disappear on the LCD.



中文

高级拍摄技巧

● REMOCON（遥控）

- ⌘ 可以在CAMERA（摄像机）、PLAYER（放像机）、M.REC（照片录制）、M.PLAY（照片播放）模式下使用REMOCON（遥控）功能。
- ⌘ REMOCON（遥控）选项可以帮助您使用或禁用遥控器操作摄录一体机。

1. 按MENU（菜单）按钮。
   - ■ 之后会出现菜单列表。
2. 拨动MENU DIAL（菜单拨盘）以使高亮显示INITIAL（初始），并按ENTER（确认）按钮。
3. 使用MENU DIAL（菜单拨盘）从子菜单选择WL.REMOTE（遥控）。
4. 按ENTER（确认）按钮以使用或禁止遥控器。每次按ENTER（确认）按钮时，设置都会在ON/OFF（开/关）之间进行切换。
5. 若要退出，按下MENU（菜单）按钮即可。
   - ■ 如果您在菜单中将遥控器设置为OFF（关闭）并试图使用遥控器，那么遥控器图标会持续闪烁3秒钟，而后在液晶显示屏上消失。

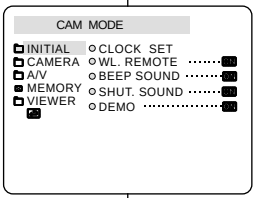
ENGLISH

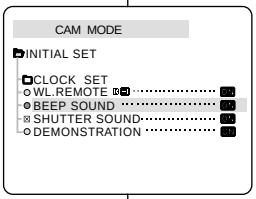
Advanced Recording

● BEEP SOUND

- ⌘ The BEEP SOUND function works in CAMERA, PLAYER, M.REC, M.PLAY modes.
- ⌘ Use the MENU to setup the BEEP SOUND function.
  Select whether or not you want to hear a beep sound whenever you change a setup value.

1. Press the MENU button.
   - ■ The menu list will appear.
2. Turn the MENU DIAL to highlight INITIAL and press the ENTER button.
3. Use the MENU DIAL to select BEEP SOUND from the submenu.
4. Press the ENTER button to enable or disable the BEEP SOUND.
   The setting switches between ON/OFF each time you press the ENTER button.
   - ■ You will hear a Beep Sound when you select the ON setup.
   - ■ When you press the START/STOP button to start recording, the BEEP SOUND is automatically set to OFF so you can't hear it any longer.
5. To exit, press the MENU button.





中文

高级拍摄技巧

● BEEP SOUND（蜂鸣音）

- ⌘ 可以在CAMERA（摄像机）、PLAYER（放像机）、M.REC（照片录制）、M.PLAY（照片播放）模式下使用BEEP SOUND（蜂鸣音）功能。
- ⌘ 使用MENU（菜单）来设置BEEP SOUND（蜂鸣音）功能。
  您可以选择在改变设置值时是否发出蜂鸣音。

1. 按下MENU（菜单）按钮。
   - ■ 之后会出现菜单列表。
2. 拨动MENU DIAL（菜单拨盘）以便高亮显示INITIAL（初始），并按ENTER（确认）按钮。
3. 使用MENU DIAL（菜单拨盘）从子菜单选择BEEP SOUND（蜂鸣音）。
4. 按ENTER（确认）按钮以使用或禁止BEEP SOUND（蜂鸣音）功能。
   每次按下ENTER（确认）按钮时，设置都会在ON/OFF（开/关）间进行一次切换。
   - ■ 当您设置为ON（开）时，便可以听到蜂鸣音。
   - ■ 在您按下START/STOP（开始/停止）按钮开始拍摄时，蜂鸣音将自动设置为OFF（关闭），您将不再听到蜂鸣音。
5. 若要退出，按下MENU（菜单）按钮即可。

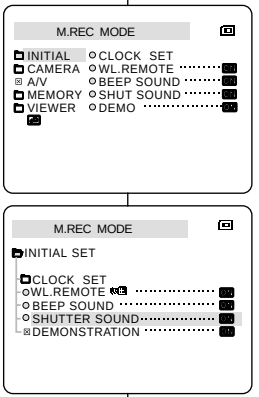
ENGLISH

Advanced Recording

● SHUTTER SOUND

- ⌘ You can hear SHUTTER SOUND only when the PHOTO function is working.
- ⌘ Determines whether or not you wish to hear a SHUTTER SOUND when using the DSC feature.

1. Set the mode switch to MEMORY STICK.
2. Set the power switch to CAMERA mode .
3. Press the MENU button.
   - ■ The menu list will appear.
4. Turn the MENU DIAL to highlight INITIAL and press the ENTER button.
5. Use the MENU DIAL to select SHUTTER SOUND from the submenu.
6. Press ENTER to switch between ON and OFF.
7. To exit, press the MENU button.



中文

高级拍摄技巧

● SHUTTER SOUND（快门音）

- ⌘ 只有在PHOTO（拍照）功能工作时，才能听到SHUTTER SOUND（快门音）。
- ⌘ 使用DSC功能时可决定是否需要SHUTTER SOUND（快门音）。

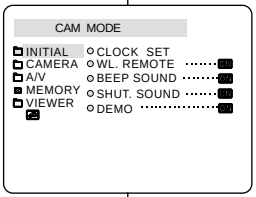
1. 将本机设置为记忆棒模式。
2. 将功能开关切换到CAMERA（摄像机）模式。
3. 按下MENU（菜单）按钮。
   - ■ 之后，会出现菜单列表。
4. 拨动MENU DIAL（菜单拨盘）以便高亮显示INITIAL（初始），并按下ENTER（确认）按钮。
5. 使用MENU DIAL（菜单拨盘）在子菜单中选择SHUTTER SOUND（快门音）。
6. 按ENTER（确认）以便在ON（开）和OFF（关）之间切换。
7. 若要退出，按下MENU（菜单）按钮即可。

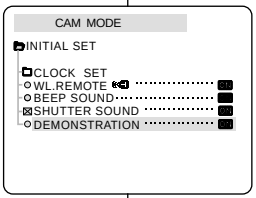
Advanced Recording

● DEMONSTRATION

- Demonstration automatically shows you the major functions that are included with your camcorder so that you may use them more easily.
- The DEMONSTRATION function may only be used in the CAMERA mode without a tape inserted in the camcorder.
- The demonstration operates repeatedly until the DEMONSTRATION mode switched OFF.

1. Set the camcorder to CAMERA mode.
2. Press the MENU button.
   - The menu list will appear.
3. Turn the MENU DIAL to highlight INITIAL.
4. Select DEMONSTRATION from the submenu and press the ENTER button.
5. To activate the DEMONSTRATION, set DEMONSTRATION ON.
   - Press the menu button to quit the menu.
   - The demonstration will begin.
6. To end the DEMONSTRATION, set the DEMONSTRATION to OFF.





Reference

- The DEMONSTRATION function only works without a TAPE installed.
- The DEMONSTRATION mode is automatically activated when the camcorder is left idle for more than 10 minutes after switching to the CAMERA mode (no tape is inserted in the camcorder).
- If you press other buttons (FADE, BLC, PHOTO, EASY) during the DEMONSTRATION mode, the DEMONSTRATION stops temporarily and resumes 10 minutes later if you do not operate any other functions.
- While setting the NIGHT CAPTURE to ON, the DEMONSTRATION function does not work.

高级拍摄技巧

● DEMOSTATION（演示状态）

- 演示功能将自动向您展示摄录一体机所具有的主要功能，以便您能够简易地使用这些功能。
- DEMOSTATION（演示状态）功能只能在CAMERA（摄像机）模式下使用，而且在演示状态下，请不要在摄录一体机内插入录像带
- 演示功能将反复操作直到您将DEMOSTATION（演示）模式切换到OFF（关闭）。

1. 将摄录一体机设置为CAMERA（摄像机）模式。
2. 按下MENU（菜单）按钮。
   - 之后，会出现菜单列表。
3. 拨动MENU DIAL（菜单拨盘）以便高亮显示INITIAL（初始）。
4. 从子菜单中选择DEMOSTATION（演示状态）并按ENTER（确认）按钮。
5. 若要激活DEMOSTATION（演示）功能，请将DEMOSTATION（演示）设置为ON（开）。
   - 按下MENU（菜单）按钮以退出菜单。
   - 演示开始。
6. 若要关闭DEMOSTATION（演示），将DEMOSTATION（演示）设置为OFF（关）即可。

注意

- 只有在没有装入录像带的情况下，DEMOSTATION（演示）功能才能工作。
- 在摄录一体机切换到CAMERA（摄像机）模式（摄录一体机内没有装入录像带）后闲置超过10分钟，DEMOSTATION（演示）模式将会自动启动。
- 在DEMOSTATION（演示）模式期间，如果您按下其它键［FADE（淡入淡出）、BLC（背光补偿）、PHOTO（拍照）、EASY（简易）］，DEMOSTATION（演示）都会暂停，但是，如果您在10分钟内不使用其他功能的话，DEMOSTATION（演示）功能将会被重新激活。
- 当NIGHT CAPTURE（夜景拍摄）设置为ON（开）时，DEMONSTRATION（演示状态）功能无法工作。

Advanced Recording

● PROGRAM AE

- ⌘ The PROGRAM AE function works in CAMERA mode only.
- ⌘ The PROGRAM AE mode allows you to adjust shutter speeds and apertures to suit different recording conditions.
- ⌘ They give you creative control over the depth of field.

■ AUTO mode

- Auto balance between the subject and the background.
- To be used in normal conditions.
- The shutter speed automatically varies from 1/50 to 1/250 per second, depending on the scene.

■ SPORTS mode ( )

- For recording people or objects moving quickly.

■ PORTRAIT mode ( )

- For focusing on the background of the subject, when the background is out of focus.
- The PORTRAIT mode is most effective when used outdoors.
- The shutter speed automatically varies from 1/50 to 1/1000 per second.

■ SPOTLIGHT mode ( )

- For recording correctly when there is only light on the subject and not the rest of the picture.

■ SAND/SNOW mode ( )

- For recording when people or objects are darker than the background because of reflected light from sand or snow.

■ High S. SPEED(High Shutter Speed) mode ( )

- For recording fast-moving subjects such as players in golf or tennis games.

高级拍摄技巧

● PROGRAM AE（程序自动曝光）

- ⌘ 只有在CAMERA（摄像机）模式下，才能使用PROGRAM AE（程序自动曝光）功能。
- ⌘ PROGRAM AE（程序自动曝光）模式允许 您按照不同的拍摄 条件调整快门速度和光圈。
- ⌘ 这样，您就能对 景深进行有创意的 控制。

■ AUTO（自动）模式

- 使被拍摄物体与背景之间自 动平衡。
- 可以在正 常条件下使用。
- 根据被拍摄的场景，快门速度 可在每秒1/50至1/250之间自动改变。

■ SPORTS（运动）模式 ( )

- 拍摄快速 移动的人或物体 。

■ PORTAIT（肖像）模式 ( )

- 在背景没 有被聚焦时，聚焦于被 摄物体的背景 。
- 在室外拍 摄时使用PORTAIT（肖像） 模式最为有效。
- 快门速度 可在每秒1/50 至1/1000范围内自 动改变。

■ SPOTLIGHT（聚光灯）模式 ( )

- 在只有被 摄物体上有光而图 像其余部分没有 光的情况下，采用该模式可以正确地拍摄 。

■ SAND/SNOW（沙滩/雪地）模式 ( )

- 在由于存 在沙地或积雪反射 的光而使被摄的 人或物体比背景暗的情况下，可以使用 该模式拍摄。

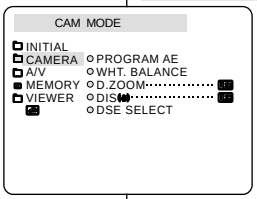
■ High S.SPEED（High Shutter Speed，高速快门）模式 ( )

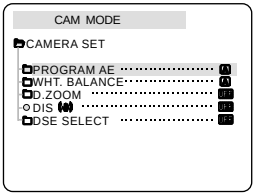
- 用于拍摄 快速移动的物体 ，例如高尔 夫或网球运动员的 比赛姿态。

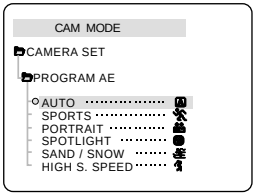
Advanced Recording

Setting the PROGRAM AE

1. Press the MENU button.
   - The menu list will appear.
2. Turn the MENU DIAL to highlight CAMERA and press the ENTER button.
3. Select PROGRAM AE from the submenu.
4. Press the ENTER button to enter the sub-menu.
5. Using the MENU DIAL, select the PROGRAM AE mode.
   - Press the ENTER button to confirm the PROGRAM AE mode.
6. To exit, press the MENU button.







高级拍摄技巧

设置程序自 动曝光

1. 按下MENU（ 菜单）按钮。
   - 之后，会出现菜 单列表。
2. 拨动MENU DIAL（菜单拨盘）以便高亮 显示CAMERA（摄像机），并按下ENTER（ 确认）按钮。
3. 从子菜单 选择PROGRAM AE（程序自动 曝光）。
4. 按ENTER（确认）按钮进入 子菜单。
5. 使用MENU DIAL （菜单拨盘），选择PROGRAM AE（程序自动曝光 ）模式。
   - 按ENTER（确认） 按钮，确认PROGRAM AE（程序自动曝光）模式。
6. 若要退出，按下MENU（菜单）按钮即可 。

Advanced Recording

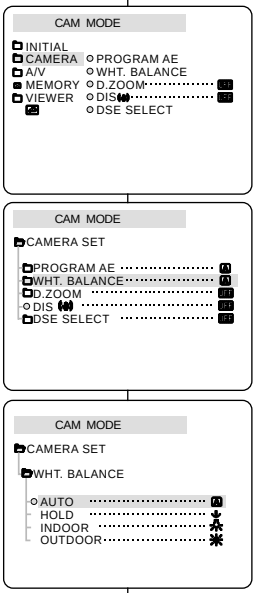
● WHT. BALANCE (WHITE BALANCE)

- The WHITE BALANCE function works in CAMERA or M.REC mode only.
- The WHITE BALANCE is a recording function that preserves the unique colour of the object in any recording condition.
- You may select the appropriate WHITE BALANCE mode to obtain good quality colour of the image.
  - AUTO (A) : This mode is generally used to control the WHITE BALANCE automatically.
  - HOLD ( ) :This fixes the current WHITE BALANCE value.
  - INDOOR ( ) : This controls the WHITE BALANCE according to the indoor ambience.
  - OUTDOOR ( ) : This controls the WHITE BALANCE according to the outdoor ambience.

1. Set the camcorder to CAMERA mode.
2. Press the MENU button.
   - The menu list will appear.
3. Turn the MENU DIAL to highlight CAMERA and press the ENTER button.
4. Select WHT.BALANCE from the submenu.
5. Press the ENTER button to enter the sub-menu.
6. Using the MENU DIAL, select the WHITE BALANCE mode.
   - Press the ENTER button to confirm the WHITE BALANCE mode.
7. To exit, press the MENU button.

Reference

- While setting the NIGHT CAPTURE to ON, the WHT.BALANCE function does not work.
- The WHT.BALANCE function will not operate in EASY mode.
- Turn the digital zoom off (if necessary) to set a more accurate white balance.
- If you have set the white balance and lighting conditions changes, reset the white balance.
- During normal outdoor recording, setting to AUTO may provide better results.



高级拍摄技巧

● WHT.BALANCE (WHITE BALANCE，白平衡)

- 只有在CAMERA（摄像机）、M.REC（照片录制）模式下才能使用白平衡功能。
- 白平衡功能是一种可以在任何条件下保持被摄物体独特色彩的拍摄功能。
- 您可选择合适的白平衡模式来获取具有优良质量的图像色彩。
  - AUTO（自动）(A) : 该模式一般在自动控制白平衡时使用。
  - HOLD（保持）( ) : 该模式可以固定当前的白平衡值。
  - INDOOR（室内）( ) : 该模式可以按照室内的环境控制白平衡。
  - OUTDOOR（室外）( ) : 该模式可以按照室外的环境控制白平衡。

1. 将摄录一体机设置为CAMERA（摄像机）模式。
2. 按下MENU（菜单）按钮。
   - 之后，会出现菜单列表。
3. 拨动MENU DIAL（菜单拨盘）以便高亮显示CAMERA（摄像机），并按下ENTER（确认）按钮。
4. 从子菜单选择WHT.BALANCE（白平衡）。
5. 按ENTER（确认）按钮进入子菜单。
6. 使用MENU DIAL（菜单拨盘），并选择WHITE BALANCE（白平衡）模式。
   - 按ENTER（确认）按钮以确认WHITE BALANCE（白平衡）模式。
7. 若要退出，按下MENU（菜单）按钮即可。

注意

- 将NIGHT CAPTURE（夜间拍摄）功能设置为ON（开）时，不能使用白平衡功能。
- 在EASY（简易）模式下，不能使用白平衡功能。
- 关闭数字变焦（如有必要）以设置更精确的白平衡。
- 如果已设置了白平衡且更改了照明条件，则请重新设置白平衡。
- 在室外正常拍摄期间，将其设置为AUTO（自动）模式，将能获得更好的效果。

Advanced Recording

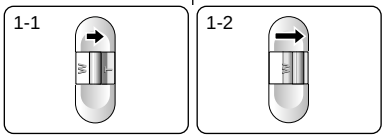
Zooming In and Out with DIGITAL ZOOM

- Zoom works in CAMERA mode only.

Zooming In and Out

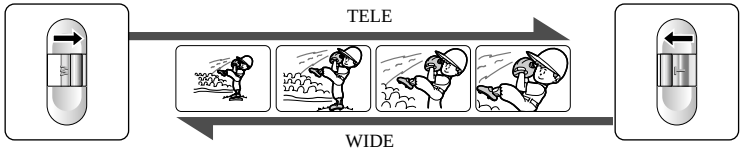
- Zooming is a recording technique that lets you change the size of the subject in a scene.
  For more professional looking recordings, do not use the zoom function too often.
- You can zoom using variable zoom speeds.
- Use these features for different shots. Please note that over-use of the zoom feature can lead to unprofessional looking results and a reduction of battery usage time.

1. Move the zoom lever slightly for a gradual zoom, move it further for a high-speed zoom.
   Your zooming is monitored on the OSD.



2. T(Telephoto) side:
   Subject appears closer.

3. W(Wide angle) side:
   Subject appears farther away.



Reference

You can record a subject that is a minimum of 1 m (about 2.65 feet) away from the lens surface in the TELE position,or about 10 mm (about 0.5 inch) away in the WIDE position.

高级拍摄技巧

采用DIGITAL ZOOM（数字变焦）推近和拉远

- 只有在CAMERA（摄像机）模式下才能使用变焦功能。

Zooming In and Out（推近和拉远）

- 变焦是一种拍摄技术，它可帮助您改变场景中被摄物体的大小。
  为了得到更接近专业水平的拍摄效果，请不要过多地使用变焦功能。
- 您可使用可变变焦速度进行变焦。
- 可以对各种不同的拍摄使用这些功能。请注意，过多地使用变焦会使拍摄效果看起来不专业，并且还会减短电池的寿命。

1. 如需逐步变焦，请稍稍移动变焦手柄即可；如需快速变焦，则请将变焦杆移动得更大一些。您可在OSD（在屏显示）中监视变焦情况。

2. T（Telephoto，远距摄像）侧：让被摄体看起来近一些。

3. W（Wide angle，广角）侧：让被摄体看起来远一些。

注意

您可在TELE（远距摄像）位置处，拍摄距镜头表面的最近距离为1米（约2.65英尺）的物体；或在WIDE（广角）位置处拍摄约10毫米（约0.5英寸）远的物体。

ENGLISH

Advanced Recording

Digital Zoom

- Zooming more than 10x is achieved digitally.
- The picture quality may deteriorate depending on how much you zoom in on the subject.
- We recommend that you use the DIS feature with DIGITAL ZOOM for picture stability. (see page 47)

1. Set the camcorder to CAMERA mode.
2. Press the MENU button.
   - The menu list will appear.
3. Turn the MENU DIAL to CAMERA and press the ENTER button.
4. Select D.ZOOM from the submenu.
5. Press the ENTER button to setup the 100x, 200x, 400x, 800x digital zoom function or to turn the feature OFF.
6. To exit, press the MENU button.

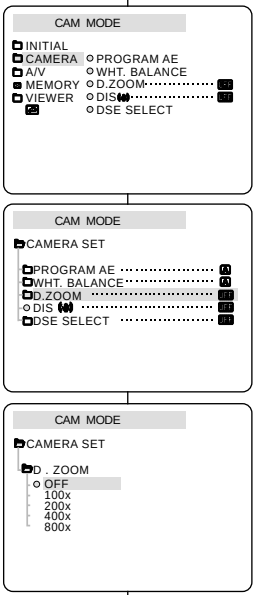
中文

高级拍摄技巧

Digital Zoom（数字变焦）

- 超过10X（10倍）的变焦是以数字方式执行的。
- 图像的质量会依据推近物体的程度的加大而下降。
- 我们建议您在使用数字变焦功能的同时，使用DIS（数字图像稳定器）功能来保证图像稳定性。（见47页）

1. 将摄录一体机设置为CAMERA（摄像机）模式。
2. 按下MENU（菜单）按钮。
   - 之后，会出现菜单列表。
3. 拨动MENU DIAL（菜单拨盘）直到选中CAMERA（摄像机），并按下ENTER（确认）按钮。
4. 从子菜单选择D.ZOOM（数字变焦）。
5. 按ENTER（确认）按钮以设置100X、200X、400X、800X数字变焦功能或将该功能设置为OFF（关闭）。
6. 若要退出，按下MENU（菜单）按钮即可。

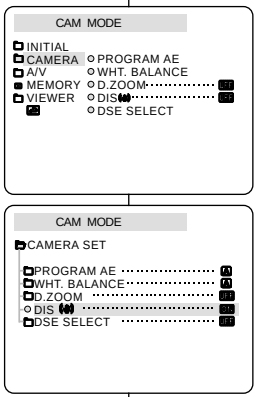


Advanced Recording

● DIS (Digital Image Stabilizer)

- ⌘ The DIS function works in CAMERA mode only.
- ⌘ DIS (Digital Image Stabilizer) is a function that compensates for any shaking or hand movement while holding the camcorder (within reasonable limits).
- ⌘ It provides more stable pictures when:
  - ■ Recording with the zoom
  - ■ Recording a small object close-up
  - ■ Recording and walking at the same time
  - ■ Recording through the window of a vehicle

1. Set the camcorder to CAMERA mode.
2. Press the MENU button.
   - ■ The menu list will appear.
3. Turn the MENU DIAL highlight to CAMERA and press the ENTER button.
   - ■ The sub menu list will appear.
4. Turn the MENU DIAL to activate the DIS function, press the ENTER button.
   - ■ The DIS menu is changed to ON.
   - ■ If you do not want to use the DIS function, set the DIS menu to OFF.
5. To exit, press the MENU button.



Reference

- ■ It is recommended that you deactivate the shake compensation function when using a tripod.
- ■ If you use the DIS function, the picture quality may deteriorate

高级拍摄技巧

● DIS（Digital Image Stabilizer，数字图像稳定器）

- ⌘ 只有在CAMERA（摄像机）模式下，才能使用数字图像稳定器（DIS）功能。
- ⌘ 数字图像稳定器（DIS）是一种可以用来补偿握住摄录一体机时的手抖或移动的功能（在合理限度内）。
- ⌘ 在下列情况下，它能提供更为稳定的图像：
  - ■ 使用变焦拍摄
  - ■ 对近距离的小物体进行特写拍摄
  - ■ 一边走一边拍摄
  - ■ 透过车窗拍摄

1. 将摄录一体机设置为CAMERA（摄像机）模式。
2. 按下MENU（菜单）按钮。
   - ■ 之后，会出现菜单列表。
3. 拨动MENU DIAL（菜单拨盘）以便高亮显示CAMERA（摄像机），并按ENTER（确认）按钮。
   - ■ 之后，会出现子菜单列表。
4. 转动MENU DIAL（菜单拨盘）以激活DIS功能，并按下ENTER（确认）按钮。
   - ■ DIS菜单将更换到ON（开）。
   - ■ 如果您不想使用DIS功能，则请将DIS菜单设置为OFF（关）。
5. 若要退出，按下MENU（菜单）按钮即可。

注意

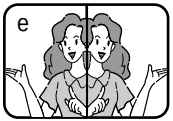
- ■ 建议您在使用三角架时，停用抖动补偿功能。
- ■ 如果您在此时使用DIS功能，图像的质量将更差。

Advanced Recording

● DSE(Digital Special Effects) SELECT

- ⌘ The DSE function works in CAMERA mode only.
- ⌘ The digital effects enable you to give a creative look to your recording by adding various special effects.
- ⌘ Select the appropriate digital effect for the type of picture that you wish to record and the effect you wish to create.
- ⌘ There are 9 DSE modes.

a. ART mode
This mode gives the images a coarse effect.
b. MOSAIC mode
This mode gives the images a mosaic effect.
c. SEPIA mode
This mode gives the images a reddish-brown pigment.
d. NEGA mode
This mode reverses the colours of the images, creating a negative image.
e. MIRROR mode
This mode cuts the picture in half, using a mirror effect.
f. BLK & WHT mode
This mode changes the images to black and white.
g. EMBOSS mode
This mode creates a 3D effect (embossing).
h. CINEMA mode
This mode covers the upper/lower portions of the screen to give a cinematic effect.
i. MAKE - UP mode
This mode allows the images to be selected in red, green, blue or yellow colours.



高级拍摄技巧

● DSE（Digital Special Effects，数字特殊效果）选择

- ⌘ 只有在CAMERA（摄像机）模式下才能使用数字特殊效果功能。
- ⌘ 数字特殊效果可为您拍摄的图像增添各种特殊效果，并使拍摄的图像更具创意。
- ⌘ 对您需要拍摄的图像选择所需的合适的数字特殊效果类型和希望创建的效果。
- ⌘ 有9种DSE模式。

a. ART（艺术）模式
该模式将赋予图像一种粗糙的效果。
b. MOSAIC（马赛克）模式
该模式将赋予图像马赛克效果。
c. SEPIA（仿古）模式
该模式将会为图像赋上一层红褐色。
d. NEGA（负片）模式
该模式将会反转所拍摄图像的色彩，创建一个负片图像。
e. MIRROR（镜像）模式
该模式将会图像对半剪切，以产生镜像效果。
f. BLK & WHT（黑白）模式
该模式将会把图像转变为黑白图像。
g. EMBOSS（浮雕）模式
该模式将创建一个三维效果（浮雕）。
h. CINEMA（电影）模式
该模式将盖住屏幕的上部/下部以提供电影的效果。
i. 发MAKE-UP（化装）模式
该模式允许用红色、绿色、蓝色或黄色选择图像。

ENGLISH

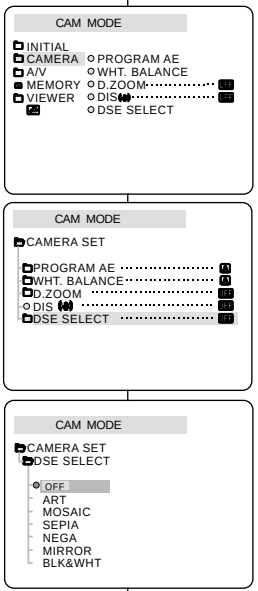
Advanced Recording

Selecting an effect

1. Set the camcorder to CAMERA mode.
2. Press the MENU button.
   - The menu list will appear.
3. Turn the MENU DIAL to highlight CAMERA and press the ENTER button.
4. Select DSE SELECT from the submenu.
5. Press the ENTER button to enter the submenu.
6. Using MENU DIAL, select the DSE mode.
   - Press the ENTER button to confirm the DSE mode.
7. To exit, press the MENU button.

Reference

- While setting the NIGHT CAPTURE to ON, the DSE function does not work.
- The DSE function will not operate in EASY mode.



中文

高级拍摄技巧

选择效果

1. 将摄录一体机设置为CAMERA（摄像机）模式。
2. 按下MENU（菜单）按钮。
   - 之后，会出现菜单列表。
3. 拨动MENU DIAL（菜单拨盘）以便高亮显示CAMERA（摄像机），并按下ENTER（确认）按钮。
4. 从子菜单中选择DSE SELECT（数字特殊效果选择）。
5. 按ENTER（确认）按钮以进入子菜单。
6. 使用MENU DIAL（菜单拨盘），选择DSE模式。
   - ENTER（确认）按钮以确认DSE模式。
7. 若要退出，按下MENU（菜单）按钮。

注意

- 将NIGHT CAPTURE（夜间拍摄）设置为ON（开）时，不能使用DSE功能。
- 在EASY（简易）模式下，不能使用DSE功能。

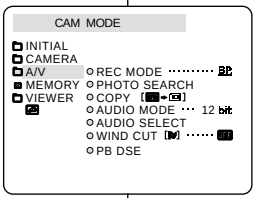
ENGLISH

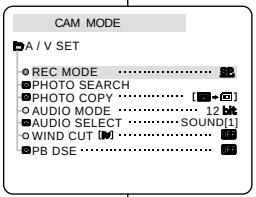
Advanced Recording

● REC MODE

- ⌘ The REC MODE function works in both CAMERA and PLAYER (VP-D23i/D24i only) modes.
- ⌘ This camcorder records and plays back in SP (standard play) mode and in LP (long play) mode.
  - ■ SP (standard play): This mode permits 60 minutes of recording time with a DVM60 tape.
  - ■ LP (long play): This mode permits 90 minutes of recording time with a DVM60 tape.

1. Set the camcorder to CAMERA or PLAYER (VP-D23i/D24i only) mode.
2. Press the MENU button.
   - ■ The menu list will appear.
3. Turn the MENU DIAL to highlight A/V and press the ENTER button.
4. Select REC MODE from the submenu and press the ENTER button.
   - ■ The REC MODE toggles between SP and LP with each press.
5. To exit, press the MENU button.





Reference

- ■ We recommend that you use this camcorder to play back any tapes recorded on this camcorder.
  Playing back a tape recorded in other equipment may produce mosaic shaped distortion.
- ■ When you record a tape in SP and LP modes, or LP mode only, the playback picture may be distorted or the time code may not be written properly between scenes.
- ■ Record using SP mode for best picture and sound quality.

中文

高级拍摄技巧

● REC MODE（录制模式）

- ⌘ 可以在CAMERA（摄像机）和PLAYER（放像机）（仅限与VP-D23i/D24i）模式下使 用REC MODE（拍摄模式）。
- ⌘ 在SP（standard play，标准播放）模式和LP（long play，长时播放）模式下的 摄录一体机的拍摄 和播放。
  - ■ SP（标准播放）：该模式可以支持型号为DVM60的录像带 长达60分钟的拍 摄。
  - ■ LP（长时播放）：该模式可以支持型号为DVM60的录像带 长达90分钟的拍 摄。

1. 将摄录一体机设置为CAMERA（摄像机）或PLAYER（放像机）（仅限与VP-D23i/D24i）模式。
2. 按下MENU（菜单）按钮。
   - ■ 之后，会出现菜 单列表。
3. 拨动MENU DIAL（菜单拨盘），以便高亮 显示A/V，并按下ENTER（确认）按钮。
4. 从子菜单 选择REC MODE（拍摄模式），并按下ENTER（确认）按钮。
   - ■ 每按下一次，REC MODE（拍摄模式）都会在SP（标准播放）和LP（长时播放）之间切换一次。
5. 若要退出，按下MENU（菜单）按钮即可 。

注意

- ■ 我们建议 您使用本摄录一体 机播放使用同类摄录一体机录制的 录像带。
  播放使用 其它设备录制的录 像带有可能会产 生马赛克状的失真
- ■ 如果以SP（标准播放）和LP（长时播放）模式，或只在LP（长时播放）模式下录 制录像带，播放图像 可能会被扭曲或时间代码不能正确地写入 各个场景之间。
- ■ 为了获得 最佳的图像和音质，请使用SP（标准播放）模式。

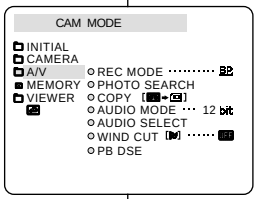
ENGLISH

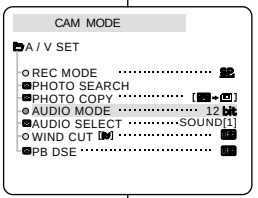
Advanced Recording

● AUDIO MODE

- ⌘ The AUDIO MODE function works in CAMERA and PLAYER (VP-D23i/D24i only) modes.
- ⌘ This camcorder records sound in two ways. (12bit, 16bit)
  - ■ 12bit : You can record two 12bit stereo sound tracks.
    The original stereo sound can be recorded onto the MAIN (SOUND1) track.
    Additional stereo sound can be dubbed onto the SUB (SOUND2) track.
  - ■ 16bit : You can record one high quality stereo sound using the 16bit recording mode.
    Audio dubbing is not possible when using this mode.

1. Set the camcorder to CAMERA mode.
2. Press the MENU button.
   - ■ The menu list will appear.
3. Turn the MENU DIAL to highlight A/V and press the ENTER button.
4. Select the AUDIO MODE from the menu and press the ENTER button.
   - ■ The AUDIO MODE toggles between 12bit-16bit with each push.
5. To exit, press the MENU button.





中文

高级拍摄技巧

● AUDIO MODE（音频模式）

- ⌘ 可以在CAMERA（摄像机）和PLAYER（放像机）（仅限与VP-D23i/D24i）模式下使用AUDIO MODE（音频模式）功能。
- ⌘ 本摄录一体机可以使用两种音频模式录音。（12位、16位）
  - ■ 12位：您可以录制两个12位立体声音轨。
    原始立体声可录制在MAIN（主）（SOUND 1）音轨上。
    附加的立体声可录制在SUB（副）（SOUND 2）音轨上。
  - ■ 16位：您可以使用16位录制模式录制高品质的立体声。
    使用这种模式时，不能使用音频配音。

1. 将摄录一体机设置为CAMERA（摄像机）模式。
2. 按下MENU（菜单）按钮。
   - ■ 之后，会出现菜单列表。
3. 拨动MENU DIAL（菜单拨盘），以便高亮显示A/V，并按下ENTER（确认）按钮。
4. 从菜单选择AUDIO MODE（音频模式）并按下ENTER（确认）按钮。
   - ■ 每按下一次，AUDIO MODE（音频模式）都会在12位-16位之间切换一次。
5. 若要退出，按下MENU（菜单）按钮即可。

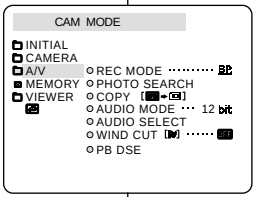
ENGLISH

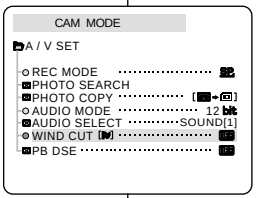
Advanced Recording

● WIND CUT

- ⌘ The WIND CUT function works in CAMERA and PLAYER (VP-D23i/D24i only) modes.
- ⌘ The WIND CUT function minimizes wind noise or other noise while recording.
  - When the wind cut is on, some low sounds are eliminated along with the sound of the wind.

1. Set the camcorder to CAMERA mode.
2. Press the MENU button.
   - ■ The menu list will appear.
3. Turn the MENU DIAL to highlight A/V and press the ENTER button.
4. Select WIND CUT from submenu.
5. This feature toggles ON/OFF each time you press the ENTER button.
6. To exit, press the MENU button.





Reference

- ■ Make sure WIND CUT is set to off when you want the microphone to be as sensitive as possible.
- ■ Use the WIND CUT when recording in windy places such as the beach or near buildings.

中文

高级拍摄技巧

● WIND CUT（风声消除）

- ⌘ 可以在CAMERA（摄像机）和PLAYER（放像机）（仅限与VP-D23i/D24i）模式下使用WIND CUT（风声消除）功能。
- ⌘ WIND CUT（风声消除）功能可以把录制时的风声或其它噪音最小化。
  - 当WIND CUT（风声消除）功能开启时，一些较小的声音也会连同风声被一道消除了。

1. 将摄录一体机设置为CAMERA（摄像机）模式。
2. 按下MENU（菜单）按钮。
   - ■ 之后，会出现菜单列表。
3. 拨动MENU DIAL（菜单拨盘），以便高亮显示A/V，并按下ENTER（确认）按钮。
4. 在子菜单中选择WIND CUT（风声消除）。
5. 每按下一次ENTER（确认）按钮，该功能都会在ON/OFF（开/关）之间切换一次。
6. 若要退出，按下MENU（菜单）按钮即可。

注意

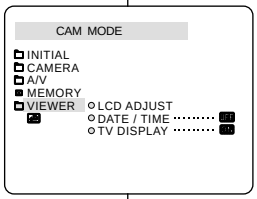
- ■ 若要使话筒尽可能地灵敏，请确保已将WIND CUT（风声消除）设置为关闭。
- ■ 在多风的地方如海滨或建筑物附近拍摄时，请使用WIND CUT（风声消除）。

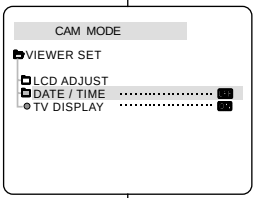
Advanced Recording

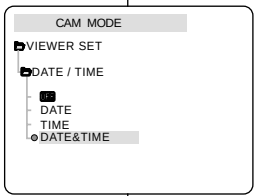
● DATE/TIME

- ⌘ The DATE/TIME function works in CAMERA, PLAYER, M.REC and M.PLAY modes.
- ⌘ The date and time are automatically recorded on a special data area of the tape.

1. Press the MENU button.
   - ■ The menu list will appear.
2. Turn the MENU DIAL to highlight VIEWER and press the ENTER button.
3. Turn the MENU DIAL to highlight DATE/TIME.
4. Press the ENTER button to select the sub-menu.
5. Using the MENU DIAL, select the DATE/TIME mode.
   - ■ You can choose to display - the OFF, DATE, TIME, DATE/TIME
     - OFF only
     - DATE only
     - TIME only
     - DATE & TIME
   - ■ To return to the previous menu, highlight the DATE/TIME in the middle of the and press the ENTER button.
6. To exit, press the MENU button.







Reference

- ■ The DATE/TIME is not affected by the OSD ON/OFF (DISPLAY) button.
- ■ The DATE/TIME will read "- - -" in the following conditions.
  - During playback of a blank section of a tape.
  - If the tape was recorded before setting the DATE/TIME in the Camera's memory.
  - When the lithium battery becomes weak or dead.
- ■ Before you can use the DATE/TIME function, you must set the Clock. See CLOCK SET on page 37.

高级拍摄技巧

● DATE/TIME（日期/时间）

- ⌘ 可以在CAMERA（摄像机）、PLAYER（放像机）、M.REC（照片录制）和M.PLAY（照片播放）模式下使 用DATE/TIME（日期/时间）功能。
- ⌘ DATE/TIME（日期/时间）可以在录 像带的特殊数据区 域内进行自动录制。

1. 按下MENU（菜单）按钮。
   - ■ 之后，会出现菜 单列表。
2. 转动MENU DIAL（菜单拨盘）以便高亮 显示VIEWER（取景器），并按下ENTER（确认）按钮。
3. 转动MENU DIAL（菜单拨盘），以便高亮 显示DATE/TIME（日期/时间）。
4. 按ENTER（确认）按钮以选 择子菜单。
5. 使用MENU DIAL（菜单拨盘），选择DATE/TIME（日期/时间）模式。
   - ■ 关闭您可 以选择以下显示 - OFF（关闭）、DATE（日期）、TIME（时间）、DATE/TIME（日期/时间）模式。
     - 仅OFF
     - 仅DATE
     - 仅TIME
     - DATE和TIME
   - ■ 若要返回 上一级菜单，请在菜单 中部高亮显示DATE/TIME（日期/时间），并按下ENTER（确认）按钮。
6. 若要退出，按下MENU（菜单）按钮即可。

注意

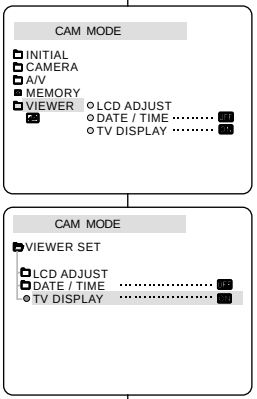
- ■ DATE/TIME（日期/时间）不受在屏 显示的开/关（DISPLAY，显示）按钮的影 响。
- ■ 在下列情 形下，DATE/TIME（日期/时间）会只显示 "- - -"。
  - 在播放录 像带的空白段时 。
  - 如果在摄 像机内存中设置DATE/TIME（日期/时间）之前，录像带已 录制完毕。
  - 在锂电池 电量不足或没电时 。
- ■ 在使用DATE/TIME（日期/时间）功能之前，必须先设 置时钟。参见第37页的CLOCK SET（时钟设置）。

Advanced Recording

● TV DISPLAY

- ⌘ The TV DISPLAY function works in CAMERA, PLAYER, M.REC and M.PLAY modes.
- ⌘ You can select the output path of the OSD (On Screen Display).
  - ■ OFF: The OSD appears in the LCD screen only.
  - ■ ON: The OSD appears in the LCD screen, VIEWFINDER and TV.
  - ■ Use the DISPLAY button located at the left side of the camcorder to turn ON/OFF all of the OSD displayed on the LCD/VIEWFINDER/TV.

1. Set the camcorder to CAMERA, PLAYER, M.REC and M.PLAY mode.
2. Press the MENU button.
   - ■ The menu list will appear.
3. Turn the MENU DIAL to highlight VIEWER and press the ENTER button.
4. Select the TV DISPLAY mode in list, press the ENTER button.
   - ■ The DISPLAY mode switches between ON/OFF with each push.
5. To exit, press the MENU button.



高级拍摄技巧

● TV DISPLAY（电视显示）

- ⌘ 可以在CAMERA（摄像机）、PLAYER（放像机）、M.REC（照片录制）和M.PLAY（照片播放）模式下使 用TV DISPLAY（TV显示）功能。
- ⌘ 您可以选 择OSD（在屏显示）的输出路径。
  - ■ OFF（关闭）：在屏显示仅出现在液晶显示 屏上。
  - ■ ON（打开）：在屏显示将在液晶显示屏、VIEWFINDER和电视上出现。
  - ■ 使用摄像 机左侧的DISPLAY（显示）按钮可关 闭在液晶显示屏/VIEWFINDER/ 电视上显 示的OSD。

1. 将摄录一体机设置为CAMERA（摄像机）、PLAYER（放像机）、M.REC（照片录制）和M.PLAY（照片播放）模式。
2. 按下MENU（菜单）按钮。
   - ■ 之后，会出现菜 单列表。
3. 转动MENU DIAL（菜单拨盘）以便高亮 显示VIEWER（取景器），并按下ENTER（确认）按钮。
4. 从列表中 选择TV DISPLAY（电视显示）模式，并按ENTER（确认）按钮。
   - ■ 每按下一次，DISPLAY（显示）模式就会 在ON/OFF（开/关）之间切换一次。
5. 若要退出，按下MENU（菜单）按钮即可。

Advanced Recording

Using Quick Menu(Navigation Menu)

⌘ Quick menu is available only in CAMERA mode.
⌘ Quick menu is used to adjust camera functions by simply using the MENU DIAL.
This feature is useful for when you want to make simple adjustments without having to access the menus and submenus.

■ DATE/TIME
- Each time you select DATE/TIME and press the ENTER button, it will be displayed in the order of DATE - TIME - DATE/TIME - OFF. (see page 53)

■ WL.REMOTE( )
- Each time you select WL.REMOTE and press the ENTER button, the WL.REMOTE is switched to either enabled ( ) or disabled ( ) .

■ DIS( )
- Each time you select DIS and press the ENTER button, the DIS icon is displayed or set to OFF.

■ DSE(Digital Special Effect) (see page 48)
- Each time you select DSE and press the ENTER button, the DSE preset values are applied or set to OFF.
DSE values will not switch between On and Off if they have not been preset in the menu.

■ PROGRAM AE (see page 42)
- Each time you select PROGRAM AE and press the ENTER button, you can choose between the preset PROGRAM AE values and AUTO. You can't choose between Auto and the PROGRAM AE values if the values have not been preset in the regular menu.

高级拍摄技巧

使用快捷菜单（导航菜单）

⌘ 只能在摄像模式下使用快捷菜单。
⌘ 通过简单地使用MENU DIAL（菜单拨盘）按钮，即可使用快捷菜单调节摄像机功能。
在您要做简单的调节而不必访问菜单和子菜单时，该功能非常有用。

■ DATE/TIME（日期/时间）
- 在您每次选择DATE/TIME（日期/时间）并按下ENTER（确认）按钮时，机器都会按DATE-TIME-DATE/TIME-OFF（日期-时间-日期/时间-关闭）的顺序进行显示。（见53页）

■ WL.REMOTE（遥控）( )
- 在您每次选择WL.REMOTE并按下ENTER（确认）按钮时，WL.REMOTE都会在启用( ) 或禁用( ) 之间切换一次。

■ DIS（数字图像稳定器）( )
- 在您每次选择DIS并按下ENTER（确认）按钮时，系统都会显示DIS图标或将其设置为OFF（关闭）。

■ DSE（数字特殊效果）（见48页）
- 在您每次选择DSE并按下ENTER（确认）按钮时，系统都会应用DSE的预设值或将其设置为OFF（关闭）。
除非为DSE预设了值，否则不能在On（打开）和Off（关闭）之间切换值。

■ PROGRAM AE（程序自动曝光）（见42页）
- 每次您选择PROGRAM AE（程序自动曝光）并按下ENTER（确认）按钮，系统都会在预设的PROGRAM AE（程序自动曝光）和AUTO（自动）之间切换一次。除非已在常规菜单中为PROGRAM AE（程序自动曝光）预设了值，否则不能在PROGRAM AE（程序自动曝光）和AUTO（自动）之间切换值。

Advanced Recording

■ WHT. BALANCE (see page 44)
- Each time you select WHT. BALANCE and press the ENTER button, you can choose between preset WHT.BALANCE values and AUTO. As in PROGRAM AE, you can't choose between Auto and WHT.BALANCE values it they have not been preset.

■ FOCUS (Manual Focus/Auto Focus) (see page 60)
- Each time you select FOCUS and press the ENTER button, the FOCUS is switched to either Manual Focus (MF) or Auto Focus (A).

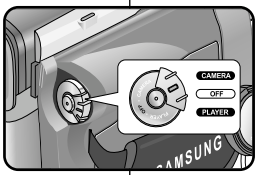
■ SHUTTER SPEED & EXPOSURE
- You can set values for SHUTTER SPEED and EXPOSURE by selecting ( ) icon and pressing the MENU DIAL. For more information, see the next chapter.

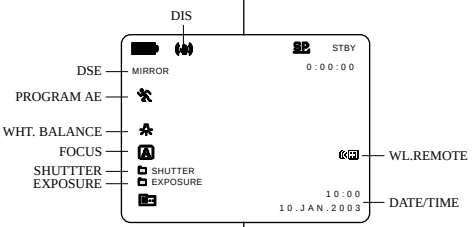
Setting the Quick menu

1. Set the camcorder to CAMERA mode.
2. Turn the MENU DIAL to select a function you want and then press the ENTER button to change the values.

Reference

- Quick menu function will not operate in EASY mode.
- If you are using the M.FOCUS(MF) function, you cannot use the Quick menu. If you want to use the Quick menu function, release the M.FOCUS(MF) mode.





高级拍摄技巧

■ WHT.BALANCE（白平衡）（见44页）
- 在您每次选择WHT.BALANCE（白平衡）并按下ENTER（确认）按钮时，系统都会在预设的WHT.BALANCE（白平衡）值以及AUTO之间切换一次。与PROGRAM AE（程序自动曝光）相类似的是，除非预设了WHT.BALANCE（白平衡）值以及AUTO值，否则不能在两者之间切换值。

■ FOCUS（调焦）（见60页）
- 在您每次选择FOCUS（调焦）并按下ENTER（确认）按钮，FOCUS（调焦）会在手动调焦（MF）或自动调焦（A）之间切换一次。

■ SHTTER SPEED & EXPOSURE（快门速度和曝光）
- 通过选择（ ）图标和按MENU DIAL（菜单拨盘），您可以为快门速度和曝光设置数值。有关详细信息，请参见下一章。

设置快捷菜单

1. 将摄像机设置为摄像模式。
2. 转动MENU DIAL（菜单拨盘）选择所需功能并按下ENTER（确认）按钮以改变数值。

注意

- 可以在EASY（简易）模式下使用快捷菜单功能。
- 如果正在使用手动调焦（MF）功能，就不能使用快捷菜单。如果想使用快捷菜单功能，则请放弃手动聚焦（MF）模式。

Advanced Recording

SHUTTER SPEED & EXPOSURE

- ⌘ You can set SHUTTER SPEED and EXPOSURE only in CAMERA mode.
- ⌘ SHUTTER SPEED and EXPOSURE values can only be set in the Quick Menu.
- ⌘ SHUTTER SPEED and EXPOSURE are automatically switched and/or deactivated.

1. Set the power switch to CAMERA mode.

2. Turn the MENU DIAL until you see icon( ) on, and then press the ENTER button.
   - ■ You see a screen on which you can select SHUTTER SPEED and EXPOSURE.
   - ■ Turn the MENU DIAL to select the item you want and then press the ENTER button.
   - ■ SHUTTER SPEED can be set to 1/50, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000 or 1/10000.
   - ■ EXPOSURE can be set between 00 and 29.

3. To exit from the setting screen, select the icon( ) and press the ENTER button.

Reference

- ■ If you want to use the selected shutter speed and exposure value, you should begin the recording with the shutter speed and the exposure adjustment screens displayed on the LCD.
- ■ If you manually change the shutter speed and the exposure value when Auto-exposure option is selected, manual changes are applied first.

高级拍摄技巧

SHTTER SPEED & EXPOSURE（快门速度和曝光）

- ⌘ 只有在CAMERA（摄像机）模式下，才能设置快门速度和曝光功能。
- ⌘ 只能在快 捷菜单中设置快门速度和曝光值。
- ⌘ 快门速度 和曝光可以自动切 换和/或禁用。

1. 将电源开关设置为CAMERA（摄像机）模式。

2. 转动MENU DIAL（菜单拨盘）直到出现（ ）图标，然后按下ENTER（确认）按钮。
   - ■ 您可以看 到一个屏幕，并可以在 该屏幕上选择快门速度和曝光。
   - ■ 转动MENU DIAL（菜单拨盘）选择所需 项，然后按ENTER（确认）按钮。
   - ■ 可以将快 门速度设置为1/50, 1/120，1/250, 1/500, 1/1000, 1/2000, 1/4000或1/10000。
   - ■ 曝光可设 置为00和29之间的任 意值。

3. 若要从设 置屏幕退出，选择图标（ ）并按ENTER（确认）按钮即可 。

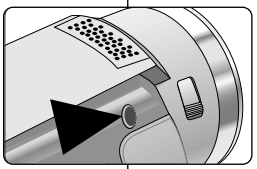
注意

- ■ 如果您想 使用选定的快门速 度和曝光值，则应该通 过显示在液晶显示屏上快门速度和曝光调节屏幕开始拍摄。
- ■ 如果在选 定了自动曝光选项时，手动改变 快门速度和曝光值，那么手动 改变值将首先生效。

Advanced Recording

SLOW SHUTTER (Low Shutter Speed)

- The SLOW SHUTTER function works in CAMERA mode only.
- The shutter speed can be controlled, allowing you to record slow moving objects.



1. Set the power switch to CAMERA mode.
2. Press the SLOW SHUTTER button.
3. Each time you press the SLOW SHUTTER button, SHUTTER SPEED is changed to 1/25, 1/13, 1/6, off.
4. To exit, press the SLOW SHUTTER button.

Reference

- When using “SLOW SHUTTER” the image takes on a slow motion like effect.
- The SLOW SHUTTER function will not operate with EASY mode.

高级拍摄技巧

SLOW SHUTTER（低速快门）

- 只有在CAMERA（摄像机）模式下，才能使用SLOW SHUTTER（低速快门）功能。
- 可以控制快门速度，这样就能 允许您拍摄慢速移 动的物体。

1. 将功能切 换到CAMERA（摄像机 ）模式。
2. 按下SLOW SHUTTER（低速快门）按钮。
3. 在您每次 按下SLOW SHUTTER（低速快门）按钮时，SHUTTER SPEED（快门速度） 都会在1/25、1/13、1/6和off间进行切 换。
4. 若要退出，按下SLOW SHUTTER（低速快门）按钮即可。

注意

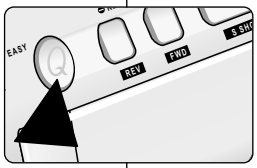
- 在使用发“SLOW SHUTTER”（低速快门）时，图像将会有一个慢速效果。
- SLOW SHUTTER（低速快门）功能不能 与EASY（简易）一同使用。

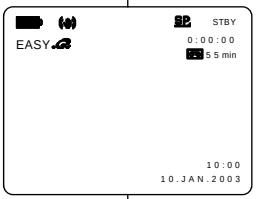
Advanced Recording

EASY Mode (for Beginners)

⌘ The EASY mode allows a beginner to easily make good recordings.
- The EASY mode only operates in CAMERA mode.

1. Set the power switch to CAMERA mode.
2. By pressing the EASY button, all functions on the camera will be set to off and the recording settings will be set to the following basic modes:
   - Battery level, recording mode, counter, DATE/TIME, and DIS ( ) will be displayed.
   - The word “EASY.Q” will appear on the LCD at the same time.
     However, the DATE/TIME will only be seen if it has been previously set. (see page 53)
3. Press START/STOP to start recording.
   - Recording will begin using the basic automatic settings.
4. Pressing the EASY button again in the STBY mode and then turns the EASY mode off.
   - The EASY function will not turn off when you have recording.
   - The camera will return to the settings that were set prior to activating EASY mode.





Reference

- In EASY mode, certain functions are not available, such as MENU, BLC, MF/AF.
  - If you want to use these functions, you must first switch the EASY mode off.
- The EASY mode settings are deleted when the battery pack is uninstalled from the camcorder and therefore, they must be reset when a battery pack has been replaced.

高级拍摄技巧

EASY（简易）模式（适用于初学者）

⌘ EASY（简易）模式可以 帮助初学者简易地 拍摄好图像。
- 只有在CAMERA（摄像机）模式下，才能使用EASY（简易）模式。

1. 将功能开关切换到CAMERA（摄像机）模式。
2. 通过按下EASY（简易）按钮，摄像机上的所有功能都将被 设置为关闭，且拍摄设 置也将会被设置成以下基本 模式:
   - 屏幕上将 会显示电池电量 、录制模式、计数器、DATE/TIME（日期/时间）和DIS ( )。
   - “EASY.Q”（简易）字样将会 同时出现在液晶显示屏上 。
     然而，只有在预先设置了DATE/TIME（日期/时间）的情况下，才会见到DATE/TIME（日期/时间）。(见53页)
3. 按START/STOP（开始/停止）开始拍摄 。
   - 拍摄会采 用基本的自动设置 开始。
4. 在STBY（待机）模式下再次按下EASY（简易）按钮时，将会关闭简易模式。
   - 在您正在 拍摄的过程中，EASY（简易）功能不会 被关闭。
   - 摄像机将 会返回到激活EASY（简易）模式前的设置。

注意

- 在EASY（简易）模式下，某些功能 不可用，如MENU（菜单）、BLC（背光补偿）、MF/AF（手动调焦/自动调焦 ）。
  - 如果您想 使用这些功能，必须首先 将EASY（简易）模式关闭。
- 如果没有 安装摄录一体机的 电池组，那么EASY（简易）模式设置就会被取 消，因此在更 换电池时，必须对其 进行重新设置。

MF/AF (Manual Focus/Auto Focus)

- The MF/AF function works in CAMERA, M.REC mode only.
- In most situations, it is better to use the automatic focus feature, as it enables you to concentrate on the creative side of your recording.
- Manual focusing may be necessary under certain conditions that make automatic focusing difficult and/or unreliable.

Auto Focusing

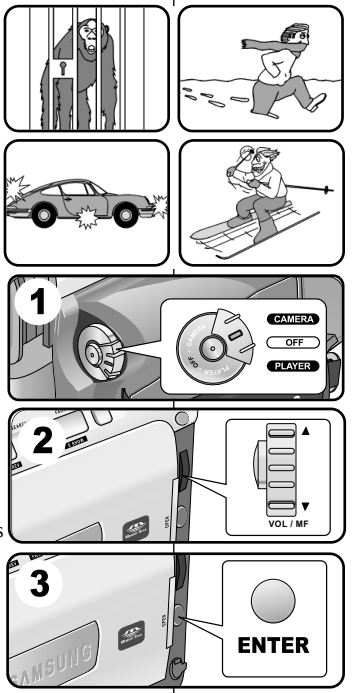
- If you are inexperienced in the use of camcorders, we recommend that you make use of Auto Focus.

Manual Focusing

- In the following cases you may obtain better results by adjusting the focus manually.

a. A picture containing several objects, some close to the camcorder, others further away.
b. A person enveloped in fog or surrounded by snow.
c. Very shiny or glossy surfaces like a car.
d. People or objects moving constantly or quickly like an athlete or a crowd.

1. Set the power switch to CAMERA mode.
2. Turn the MENU DIAL and select the FOCUS menu.
3 Press the ENTER button.
4. Turn the MENU DIAL up or down until the object is in focus.
   - Zoom out a little if focusing is difficult.
5. To return to AF(Auto Focus: Ⓐ), press the ENTER button again.



AF/MF（Manual Focus/Auto Focus，自动调焦/手动调焦）

- 只有在CAMERA（摄像机），M.REC（照片录制）模式下，才能使用AF/MF（自动调焦/手动调焦）功能。
- 在大部分情况下，最好请使用自动调焦功能，因为它能够帮助您将集中0精力在拍摄的创意上。
- 在某些特定的条件下，自动调焦很难和/或不可靠，则有可能必须使用手动调焦。

自动调焦

- 如果您对摄录一体机的使用不太熟悉，我们建议您采用自动调焦方式。

手动调焦

- 在下列情况下拍摄时，采用手动调整焦距会获得更好的结果。

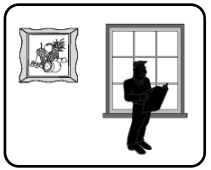
a. 画面中有若干被摄物体，一些被摄物体靠近摄录一体机，另一些被摄物体则远离摄录一体机。
b. 人被雾气笼罩或四面皆雪。
c. 光亮夺目的表面，例如，小汽车。
d. 始终在移动或快速移动的人或被摄物体，如运动员或人群。

1. 将功能开关切换到CAMERA（摄像机）模式。
2. 转动MENU DIAL（菜单拨盘）选择FOCUS（调焦）选项。
3. 按下ENTER（确认）按钮。
4. 转动MENU DIAL（菜单拨盘），直到被摄物体处于焦距内。
   - 如果很难调焦，则请稍稍推远一点。
5. 若要返回到AF（自动调焦: Ⓐ），再次按下ENTER（确认）按钮即可。

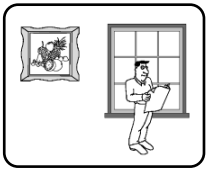
BLC (Back Light Compensation)

- ⌘ BLC works in CAMERA/M.REC mode.
- ⌘ Back lighting exists when the subject is darker than the background:
  - The subject is in front of a window.
  - The person to be recorded is wearing white or shiny clothes and is placed against a bright background; the person's face is too dark to distinguish his/her features.
  - The subject is outdoors and the background is overcast.
  - The light sources are too bright.
  - The subject is against a snowy background.

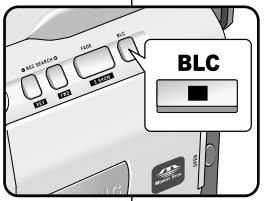
* BLC 关闭



* BLC 开启



1. Set the power switch to CAMERA mode.
2. Press the BLC button.
   - Normal - BLC - Normal
   - BLC enhances the subject.



Reference

- While setting the NIGHT CAPTURE to ON, the BLC function does not work.
- The BLC function will not operate in EASY mode.

BLC（Back Light Compensation，背光补偿）

- ⌘ 可以在CAMERA（摄像机）或M.REC（照片录制）模式下使用背光补偿(BLC)。
- ⌘ 当被摄物体比背景暗时，则会存在背光:
  - 被摄物体位于窗前。
  - 被摄人物身着白色或闪亮的服装，身后是明亮的背景，人物的面孔过暗以致无法辩认其特征。
  - 被摄体处于室外，背景是阴暗的天空。
  - 光源太亮。
  - 被摄体背景白雪皑皑。

1. 将功能开关切换到CAMERA（摄像机）模式。
2. 按下BLC（背光补偿）按钮。
   - Normal - BLC - Normal（正常 - 背光补偿 - 正常）
   - 背光补偿仅有助于被摄物体的曝光的增强。

注意

- 在将NIGHT CAPTURE（夜间拍摄）设置为ON（开）时，不能使用背光补偿功能。
- 在EASY（简易）模式下，不能使用背光补偿。

Fade In and Out

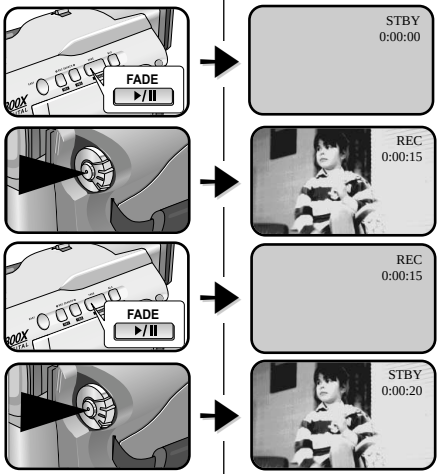
- The FADE function works in CAMERA mode only.
- You can give your recordings a professional look by using special effects such as fading in at the beginning of a sequence or fading out at the end of a sequence.

To Start Recording

1. Before recording, hold down the FADE button.
   The picture and sound gradually disappear (fade out).
2. Press the START/STOP button and at the same time release the FADE button.
   Recording starts and the picture and sound gradually appear (fade in).

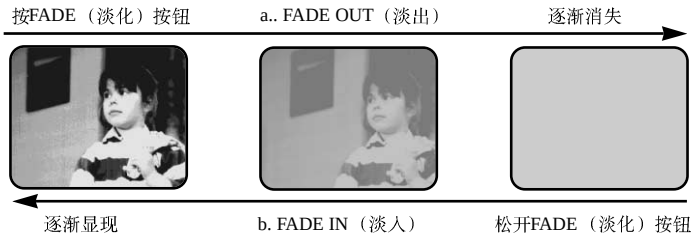
To Stop Recording (use FADE IN / FADE OUT)

3. When you wish to stop recording, hold down the FADE button. The picture and sound gradually disappear (fade out).
4. When the picture has disappeared, press the START/STOP button to stop recording.



a. FADE OUT
(Approx. 4 seconds)

b. FADE IN
(Approx. 4 seconds)



a. FADE OUT（淡出）
（约4秒钟）

b. FADE IN（淡入）
（约4秒钟）

Fade In and Out（淡入和淡出）

- 只有在CAMERA（摄像机）模式下，才能使用FADE（淡化）功能。
- 为了让拍摄的节目达到专业水准，可以使用一些特殊效果，例如在一个片断的开始用淡入的手法，而在结束时采用淡出的手法。

开始拍摄

1. 开始拍摄前，请按下FADE（淡化）按钮。
   图像和声音将逐渐消失（淡出）。
2. 按下START/STOP（开始/停止）按钮，同时松开FADE（淡化）按钮。
   摄像开始，并图像和声音逐渐显现（淡入）。

停止拍摄（使用FADE IN/FADE OUT）

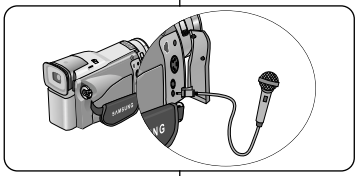
3. 当您需要停止拍摄时，请按下FADE（淡化）按钮。
   图像和声音逐渐消失（淡出）。
4. 图像消失后，请按下START/STOP（开始/停止）按钮，停止拍摄。

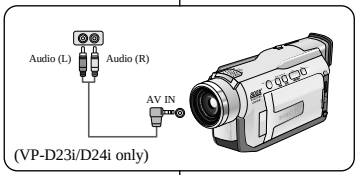
Audio dubbing

- The AUDIO DUBBING function only works in PLAYER Mode.
- You can add sound to the original sound on a pre-recorded tape, recorded in SP mode with 12bit sound.
- Use the internal and external microphones or other audio equipment.
- The original sound will not be erased.

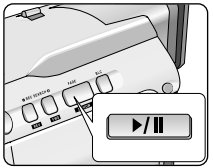
Dubbing sound

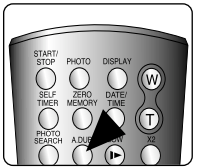
1. Set the camcorder to PLAYER mode.
   - If you want to use an external microphone, connect the microphone to the external MIC input jack on the camcorder.
   - When you wish to dub using the External A/V input, connect the AUDIO/VIDEO cable to the camcorder by inserting the cable jack into the A/Vin/out terminal at the left side of the camcorder. (VP-D23i/D24i only)
     - Press the MENU button, turn the MENU DIAL to highlight A/V and press the ENTER button.
     - Turn the MENU DIAL to highlight AV IN/OUT and press the ENTER button to select AV IN.
2. Press the ▶/II (PLAY/STILL) button and find the timeframe of the scene to be dubbed.
3. Press the ▶/II (PLAY/STILL) button to pause the scene.
4. Press the A.DUB button on the Remote Control.
   - A.DUB will be displayed on the LCD.
   - The camcorder is in a ready-to-dub state for dubbing.
5. Press the ▶/II (PLAY/STILL) button to start dubbing.
   - Press the ■ (STOP) button to stop the dubbing.





(VP-D23i/D24i only)





Reference

- You can not use the audio dubbing function while playing a write protected video tape.
- When you wish to dub using the External A/V input, you must connect the AUDIO/VIDEO cable to the audio system from which you wish to record. (VP-D23i/D24i only)

Audio dubbing（音频配音）

- 只有在播放模式下，才能使用AUDIO DUBBING（音频配音）功能。
- 您可在预先录制的录像带上为原声添加配音，该配音在12位声音（标准播放）模式下录制。
- 可以使用内置话筒和外接话筒或其他音频设备。
- 不会抹除原声。

配音

1. 将摄录一体机置于PLAYER（播放）模式。
   - 如果您想使用外接话筒，请将话筒连接到摄录一
     体机的外接话筒输入插孔上。
   - 如果您想使用外接A/V输入配音，则请将AUDIO/VIDEO（音频/视频）线连接到摄录一体机上，并将电缆插头插入到摄录一体机左侧的A/V输入/输出端口上。
     （仅限于VP-D23i/D24i）
     – 按下MENU（菜单）按钮，转动MENU DIAL（菜单拨盘）选择A/V，按ENTER（确认）按钮。
     – 转动MENU DIAL（菜单拨盘）高亮显示AV IN/OUT，选择A/V IN，按ENTER（确认）按钮。
2. 按下 ▶/II (PLAY/STILL)（播放/静止）按钮并找到待配音的场景的时间帧。
3. 按下 ▶/II (PLAY/STILL)（播放/静止）按钮以暂停场景。
4. 按下遥控器上的A.DUB（音频配音）按钮。
   - 液晶显示屏上会显示A.DUB（音频配音）。
   - 摄录一体机处于配音准备就绪状态。
5. 按下 ▶/II (PLAY/STILL)（播放/静止）按钮开始配音。
   - 按动■ (STOP)（停止）按钮，停止配音。

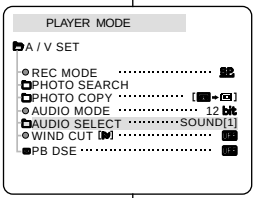
注意

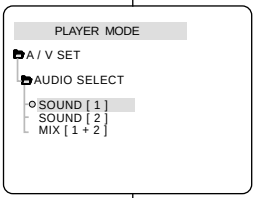
- 在播放一个带有写保护的录像带时，不能使用配音功能。
- 如果您想使用External A/V（外接A/V）输入配音，则必须将AUDIO/VIDEO（音频/视频）线将您要进行录制的系统连接到音频系统上。(仅限于VP-D23i/D24i)

Advanced Recording

Dubbed audio Playback

1. Insert the dubbed tape and press MENU button.
2. Turn the MENU DIAL to highlight A/V.
3. Press the ENTER button to enter the sub-menu.
4. Use the MENU DIAL to select AUDIO SELECT from the submenu.
5. Press the ENTER button to enter the sub-menu.
6. Using the MENU DIAL, select the AUDIO playback channel.
   - ■ Press the ENTER button to confirm the audio playback channel.
     - SOUND1 : play the original sound.
     - SOUND2 : play the dubbed sound.
     - MIX(1+2) : play back SOUND1 and 2 equally mixed.
7. To exit, press the MENU button.
8. Press the ▶/II (PLAY/STILL) button to playback the dubbed tape.





Reference

When you playback added sound (SOUND2 or MIX mode), you may experience loss of sound quality.

高级拍摄技巧

播放音频配音

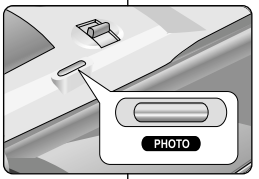
1. 插入已配音的录像带并按下MENU（菜单）按钮。
2. 转动MENU DIAL（菜单拨盘）以便高亮显示A/V。
3. 按下ENTER（确认）按钮进入子菜单。
4. 使用MENU DIAL（菜单拨盘）在子菜单中选择AUDIO SELECT（音频选择）。
5. 按ENTER（确认）按钮以进入子菜单。
6. 使用MENU DIAL（菜单拨盘），选择AUDIO播放声道。
   - ■ 按ENTER（确认）按钮确认音频播放声道。
     - – SOUND1（声道1）：播放原声。
     - – SOUND2（声道2）：重放配音。
     - – MIX（1+2）［混声（1+2）］：播放均等混合的声音1和2。
7. 若要退出，按下MENU（菜单）按钮即可。
8. 按 ▶/II（PLAY/STILL）（播放/静止）按钮播放配音录像带。

注意

在您播放添加的声音（SOUND2或MIX模式），会感到音质下降。

PHOTO Image Recording

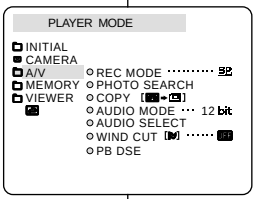
1. Press the PHOTO button and hold it.
   - ■ The still picture appears on the LCD monitor.
   - ■ If you do not wish to record, release the button.
2. Release the PHOTO button and press the PHOTO button again in 2 seconds.
   - ■ The still picture is recorded for about 6~7 seconds.
3. After the PHOTO has been recorded, the camcorder returns to STBY mode.

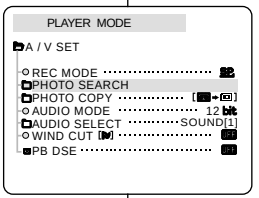


Searching for a PHOTO picture

* The PHOTO SEARCH works in PLAYER mode only.

1. ■ Press the MENU button. (or press the PHOTO SEARCH button on the remote control.)
   - ■ The MENU list will appear.
2. Turn the MENU DIAL to highlight A/V.
3. Press the ENTER button to enter the sub-menu.
4. Select PHOTO SEARCH from the sub-menu and press the ENTER button.
5. Search the PHOTO using the ▶▶ (FF) and ◀◀ (REW) buttons.
   - ■ The PHOTO search process appears on the LCD while you are searching.
   - ■ After completing the search, the camcorder displays the still image.
6. To exit, press the ■ (STOP) button.





拍摄照片

1. 按下PHOTO（拍照）按钮并且保持该状态。
   - ■ 液晶显示屏上将会出现静止的图像。
   - ■ 如果您不想拍摄，松开按钮即可。
2. 在松开PHOTO（拍照）按钮后的2秒内再次按下该按钮。
   - ■ 静止图像会被拍摄约6-7秒钟。
3. 在拍摄完照片后，摄录一体机将返回到STBY（待机）模式。

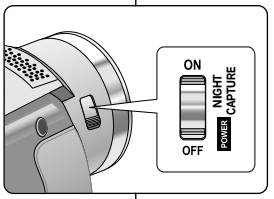
照片搜索

* 只有在PLAYER（放像机）模式下，才能使用PHOTO SEARCH（拍照记录搜索）功能。

1. 按下MENU（菜单）。（或在遥控器上按下PHOTO SEARCH按钮。）
   - ■ 之后，会出现菜单列表。
2. 转动MENU DIAL（菜单拨盘）以便高亮显示A/V。
3. 按下ENTER（确认）按钮进入子菜单。
4. 从子菜单选择PHOTO SEARCH（拍照记录搜索）并按ENTER（确认）按钮。
5. 在搜索照片时，请使用 ▶▶ （FF）（快进）和 ◀◀ （REW）（快倒）按钮。
   - ■ 在您搜索时，液晶显示屏上会出现照片搜索过程。
   - ■ 在完成搜索后，摄录一体机会显示静止图像。
6. 若要退出，请按■（停止）按钮。

NIGHT CAPTURE (0 lux recording)

- The NIGHT CAPTURE function works in CAMERA/M.REC mode.
- The NIGHT CAPTURE function enables you to record a subject in darkness.



1. Set the camcorder to CAMERA mode.
2. Slide the NIGHT CAPTURE switch to ON.
   - (NIGHT CAPTURE indicator) appears on the LCD monitor.
   - The infrared(invisible rays) light is turned on automatically.
3. To cancel the NIGHT CAPTURE function, slide the NIGHT CAPTURE switch to OFF.

Reference

- The maximum recording distance using the infrared light is about 3m (about 10 feet).
- If you use the NIGHT CAPTURE function in normal recording situations (ex. outdoors by day), the recorded picture may be tinted green.
- In the NIGHT CAPTURE mode, certain functions are not available, such as White Balance, Program AE, DSE, BLC.

NIGHT CAPTURE（夜间拍摄）(0 lux拍摄)

- 只有在CAMERA（摄像机）或M.REC（照片录制）模式下，才能使用NIGHT CAPTURE（夜间拍摄）功能。
- NIGHT CAPTURE（夜间拍摄）功能可以帮助您录制较暗地方里的被摄物体。

1. 将功能开关置于CAMERA（摄像机）模式。
2. 将NIGHT CAPTURE（夜间拍摄）开关滑动到ON（开）。
   - （夜间拍摄 指示器）会显示在液晶显示屏上。
   - 红外线（不可见光线）灯将自动开启。
3. 若要取消NIGHT CAPTURE（夜间拍摄）功能，将NIGHT CAPTURE（夜间拍摄）开关滑动到OFF（关）。

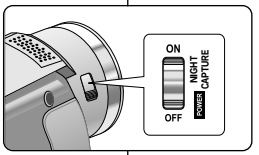
注意

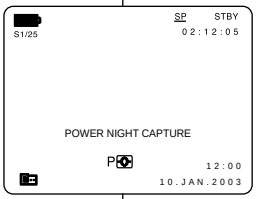
- 使用红外线灯的最大拍摄距离约为3米（大约10英尺）。
- 如果在正常的情况下使用夜间拍摄功能（不包括白天的户外），拍摄的图像可能会包含有不自然的色彩。
- 在使用夜间拍摄功能时，不能使用以下功能：-White Balance（白平衡）、Program AE（程序自动曝光）、DSE（数字特殊效果）、BLC（背光补偿）。

POWER NIGHT CAPTURE

- The POWER NIGHT CAPTURE function works in CAMERA mode.
- The POWER NIGHT CAPTURE function can record a subject more brightly in darkness than the NIGHT CAPTURE function.
- A POWER NIGHT CAPTURE is displayed for three seconds by LCD if you press a SLOW SHUTTER button in state that a NIGHT CAPTURE switch is turned on.
- When you work in POWER NIGHT CAPTURE mode, POWER NIGHT CAPTURE icon appears on the LCD continuously.

1. Set the camcorder to CAMERA mode.
2. Turn on the NIGHT CAPTURE switch, and then press the SLOW SHUTTER button.
3. Press the SLOW SHUTTER button to set shutter speed. The SLOW SHUTTER function enables you to record a subject more brightly.
4. When using POWER NIGHT CAPTURE the image takes on a slow motion like effect.
5. To cancel the POWER NIGHT CAPTURE function, press the SLOW SHUTTER button to set to “off ” and then turn off the NIGHT CAPTURE switch.





Reference

- The maximum recording distance using the infrared light is about 3 m (about 10 feet).
- If you use the POWER NIGHT CAPTURE function in normal recording situations (ex. outdoors by day), the recorded picture may contain unnatural colours.
- In the POWER NIGHT CAPTURE mode, certain functions are not available, such as White Balance, Program AE, DSE, BLC.
- When the subject is too bright, press the SLOW SHUTTER button (1/6 → 1/25) to obtain better quality recordings.

POWER NIGHT CAPTURE（超强夜间拍摄）

- 只有在CAMERA（摄像机）模式下，才能使用POWER NIGHT CAPTURE（超强夜间 拍摄）功能 。
- 在暗处，使用POWER NIGHT CAPTURE（超强夜间 拍摄）所拍摄到的物体 的效果要亮于NIGHT CAPTURE（ 夜间拍摄）所拍摄的 。
- 在NIGHT CAPTURE开启的状 态下，如果您按下SLOW SHUTTER（低速快门）按钮，那么POWER NIGHT CAPTURE将在液晶 显示屏上显示三 秒钟。
- 当您在POWER NIGHT CAPTURE模式下工 作时，POWER NIGHT CAPTURE图标将会 在液晶显示屏上持 续显示。

1. 将摄录一 体机设置为CAMERA（摄像机） 模式。
2. 打下NIGHT CAPTURE（夜间拍摄） 开关，并按下SLOW SHUTTER（低速快门 ）按钮发。
3. 按下SLOW SHUTTER（ 低速快门）按钮以设 置快门速度 。SLOW SHUTTER（低速快门）功能可以 帮助您让拍摄 的物体更明亮 。
4. 当使用POWER NIGHT CAPTURE（超强夜间 拍摄）功能时，图像会产 生一个缓慢移动的 效果。
5. 要想取消POWER NIGHT CAPTURE（超强夜间 拍摄）功能，请按下SLOW SHUTTER（低速快门）按钮将其设置为 “off”（关闭），并接着关闭NIGHT CAPTURE（夜间拍摄）开关 。

注意

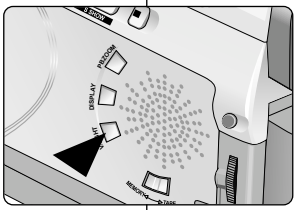
- 使用红外 线灯拍摄的最大距 离是3米（大约10英尺）。
- 如果在正 常的情况下使用夜 间拍摄功能（不包括白 天的户外），拍摄的图 像可能会包含有不 自然的色彩。
- 在使用夜 间拍摄功能时，不能使用 以下功能：-White Balance（白平衡）、Program AE（程序自动 曝光）、DSE（数字特殊 效果）、BLC（背光补偿）。
- 如果物体 太亮，您最好按 下SLOW SHUTTER（低速快门 ）按钮（1/6 →1/25），之后便可 以获得良好的拍摄 质量。

Using the VIDEO LIGHT

- VIDEO LIGHT works in CAMERA/M.REC mode only.
- To brighten the scene when natural lighting is too dim.
- VIDEO LIGHT works in SP mode only.
  - If you turn on the LIGHT in LP mode, the LIGHT indicator and “LP” will be blinking on the LCD.

DANGER

- The VIDEO LIGHT can become extremely hot. Do not touch it either while in operation or soon after turning it off, otherwise serious injury may result.
- Do not place the camcorder into the carrying case immediately after using the VIDEO LIGHT, since it can remain extremely hot for some time.
- Do not use near flammable or explosive materials.
- It is recommended that you consult your nearest SAMSUNG dealer for bulb replacement.
  - The life of the bulb is approximately 50 hours.



1. Set the camcorder to the CAMERA mode.
2. Press the V.LIGHT button.
   - The VIDEO LIGHT indicator appears on the LCD and the light is turned on.
3. If you want to turn off the VIDEO LIGHT, press the V.LIGHT button again.

Reference

- The light is turned off automatically during ejecting or inserting.
- Even if the battery indicator does not blink when the battery packs charge is low, the camcorder may turn off automatically when you turn on the light, or when you start recording with light turned on.
- The built-in light is used as a subsidiary light, it may not be enough for outdoor lighting.
- The picture quality may deteriorate if you use the VIDEO LIGHT continuously for more than 20 minutes.
- If you turn on the light in 1/6, 1/13, 1/25 SHUTTER mode, the manual SHUTTER mode will be switched off.

使用VIDEO LIGHT（视频灯）

- 只有在CAMERA（摄像机），M.REC（照片录制）模式下，才能使用VIDEO LIGHT（视频灯）。
- 当自然光线太暗时，可以使用视频灯来照亮场景。
- 只有在SP（标准播放）模式下，才能使用VIDEO LIGHT（视频灯）。
  - 如果您在SP（标准播放）模式下打开灯，灯的指示标识和“LP”就会在液晶显示屏上闪烁。

危险

- VIDEO LIGHT（视频灯）可能会变得十分烫。
  在拍摄期间以及刚刚将其关闭时，请不要用手触摸它，否则会造成严重的烫伤。
- 在使用VIDEO LIGHT（视频灯）后，请不要立即将其放置在手提箱中，因为其余热散尽还需要一定的时间
- 不要在易燃易爆的物品旁使用。
- 在更换灯泡时，我们推荐您向最近的三星经销商咨询。
  - 灯泡的使用寿命约50个小时。

1. 将摄录一体机设置为CAMERA（摄像机）模式。
2. 请按下V.LIGHT按钮。
   - VIDEO LIGHT（视频灯）指示标识将会出现在液晶显示器上，并且指示灯会打开。
3. 如果要将VIDEO LIGHT（视频灯）关闭，则请再次按下V.LIGHT按钮。

注意

- 在退出或插入期间，灯会自动关闭。
- 当电池组内所充的电量变低时，即使电池指示标识未变暗，当您打开灯或者当您打开灯的状态下开始拍摄时，摄录一体机仍会自动关闭。
- 内置灯会作为备用灯使用，它不能充当户外照明使用。
- 当您在连续20分钟以上使用VIDEO LIGHT的话，图像质量便会下降。
- 如果您将灯至于1/6、1/13和1/25快门模式下时，手动快门模式将被关闭。

Various Recording Techniques

⌘ In some situations different recording techniques may be required for more dramatic results.

Reference

Please rotate the LCD screen carefully as excessive rotation may cause damage to the inside of the hinge that connects the LCD screen to the Camcorder.

1. General recording.

2. Downward recording.

   Making a recording with a top view of the LCD screen.

3. Upward recording.

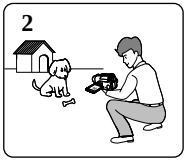
   Making a recording viewing the LCD screen from below.

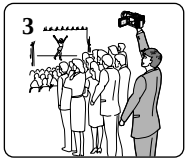
4. Self recording.

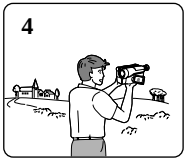
   Making a recording viewing the LCD screen from the front.

5. Recording with the Viewfinder.

   ■ In circumstances where it is difficult to use the LCD monitor, the viewfinder can be used as a convenient alternative.







各种拍摄技巧

⌘ 在某些情况下，采用各种不同的拍摄技巧会得到更显著的效果。

注意

请小心地旋转液晶显示屏，因为过度旋转可能损坏连接液晶显示屏与摄录一体机的铰链的内部铰链。

1. 一般拍摄

2. 俯视拍摄

   从上向下俯视液晶显示屏进行摄像。

3. 仰视拍摄

   从下向上仰视液晶显示屏进行摄像。

4. 自拍

   从前方观察液晶显示屏进行摄像。

5. 利用取景器摄像

   ■ 在难以使用液晶显示屏的情况下，可使用取景器作为便利的代用方案。

Tape Playback

⌘ The playback function works in PLAYER mode only.

Playback on the LCD

⌘ It is practical to view a tape using the LCD when in a car or outdoors.

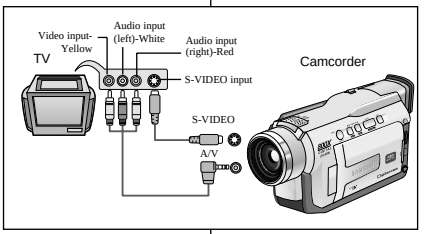
Playback on a TV monitor

⌘ To play back a tape, the television must have a compatible colour system.

⌘ We recommend that you use the AC Power Adapter as the power source for the camcorder.

Connecting to a TV which has Audio/Video input jacks

1. Connect the camcorder and TV with the Audio/Video cable.
   - ■ The yellow plug : Video
   - ■ The white plug : Audio(L)
   - ■ The red plug : Audio(R) - STEREO only
     - If you connect to a monaural TV or VCR, connect the yellow plug (Video) to the video input of the TV or VCR and the white plug (Audio L) to the audio input of the TV or VCR.



2. Set the power switch on the camcorder to PLAYER mode.
3. Turn on the TV and set the TV/VIDEO selector on the TV to VIDEO.
   - ■ Refer to the TV or VCR user's manual.
4. Play the tape back.

Reference

- ■ You may use the S-VIDEO cable to obtain better quality pictures if you have a S-VIDEO connector on your TV.
- ■ Even if you use a S-VIDEO cable, you need to connect an audio cable.
- ■ If you connect the cable to the A/V Jack, you will not hear sound from the camcorder speakers.

录像带的播放

⌘ 只有在PLAYER（播放）模式下才能使用播放功能。

在液晶显示屏上播放

⌘ 在汽车内或户外利用液晶显示屏观看录像带是切实可行的。

在电视机上播放

⌘ 要想播放录像带，电视机必须具有兼容的彩色制式。

⌘ 我们建议您把交流电源适配器用作摄录一体机的电源。

将摄录一体机与带A/V输入插孔的电视机相连

1. 使用A/V电缆将摄录一体机与电视相连。
   - ■ 黄色插头：Video（视频）
   - ■ 白色插头：Audio（L）[音频（左）]
   - ■ 红色插头：Audio（R）[音频（右）] - 只限于立体声
     - 如果要连接到单声道电视或录像机上，请将黄色插头（Video）连接到电视或录像机的视频输入端，并将白色插头（Audio L）连接到电视或录像机的音频输入上。
2. 将摄录一体机上的功能开关置于PLAYER（播放）模式。
3. 打开电视并将电视上的TV/VIDEO（电视/视频）选择开关置于VIDEO（视频）。
   - ■ 参见电视或录像机用户手册。
4. 播放录像带。

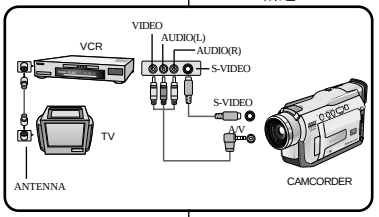
注意

- ■ 如果您的电视机带有S-VIDEO连接器，则可以使用S-VIDEO线，以获得质量更佳的图像。
- ■ 即使使用S-VIDEO线，也需要使用使用音频电缆。
- ■ 如果将线插入到A/V插孔，您将会听到扬声器里的声音。

Playback

Connecting to a TV which has no Audio and Video input jacks

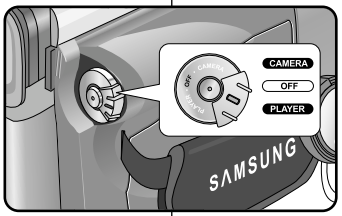
⌘ You can connect your camcorder to a TV through a VCR.



1. Connect the camcorder and VCR with the Audio/Video cable.
   - The yellow plug : Video
   - The white plug : Audio(L)
   - The red plug : Audio(R) - STEREO only
2. Connect a TV to the VCR.
3. Set the power switch on the camcorder to PLAYER mode.
4. Turn on both the TV and VCR.
   - Set the input selector on the VCR to LINE.
   - Select the channel reserved for your VCR on the TV set.
5. Play the tape back.

Playback

⌘ You can play the recorded tape in PLAYER mode.



1. Connect a power source and set the power switch to PLAYER mode.
2. Insert the tape you wish to play back.
3. Using the ▶▶ (FF) and ◀◀ (REW) buttons, find the first position you wish to play back.
4. Press the ▶/II (PLAY/STILL) button.
   - The images you recorded will appear on the TV after a few seconds.
   - If a tape reaches its end while being played back, the tape will rewind automatically.

Reference

- The playback mode (SP/LP) is selected automatically.

播放

连接到不带音频和视频输入插口的电视上

⌘ 可通过录像机将摄录一体机与没有音频和视频输入插口的电视相连。

1. 使用音频/视频电缆将摄录一体机与录像机相连。
   - 黄色插头：Video（视频）
   - 白色插头：Audio（L）［音频（左）］
   - 红色插头：Audio（R）［音频（右）］
   -只限于立体声
2. 将电视连接至录像机。
3. 将摄录一体机上的功能开关置于PLAYER（播放）模式。
4. 打开电视和录像机。
   - 将录像机上的输入选择开关置于LINE（行）。
   - 在电视机上为录像机选择预留的频道。
5. 播放录像带。

播放

⌘ 可在PLAYER（播放）模式播放录制好的录像带。

1. 连接电源，并将电源开关置于PLAYER（播放）模式。
2. 插入要播放的录像带。
3. 使用▶▶（FF）（快进）和◀◀（REW）（快倒）按钮，找到要播放的第一个位置。
4. 按下▶/II（PLAY/STILL）（播放/静止）按钮。
   - 几秒后，您录制的图像会出现在电视上。
   - 如果录像带播放到头时，录像带会自动快倒。

注意

- 播放模式（SP/LP）［（标准播放/长时播放）］将会被自动选择。

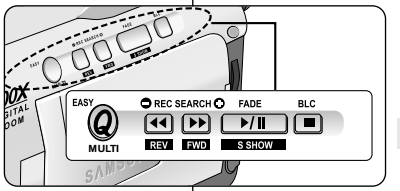
Playback

Various Functions while in PLAYER mode

- The PLAY/STILL, STOP, FF, REW buttons are located on the camcorder and the Remote Control.
- The F.ADV(Frame advance), X2, SLOW buttons are located on the Remote Control only.
- To prevent tape and head-drum wear, your camcorder will automatically stop if it is left in STILL or SLOW modes for more than 5 minutes.

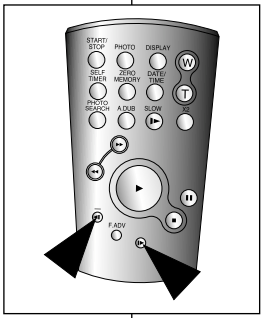
Playback pause

- Press the ▶/II (PLAY/STILL) button during Playback.
- To resume playback, press the ▶/II (PLAY/STILL) button.



Picture search (Forward/Reverse)

- Press the ▶▶ (FF) or ◀◀ (REW) buttons once during Playback or Still mode.
  To resume normal playback, press the ▶/II (PLAY/STILL) button.
- Keep pressing ▶▶ (FF) or ◀◀ (REW) buttons during Playback or Still mode.
  To resume normal playback, release the button.



Slow playback (Forward/Reverse)

- Forward Slow Playback
  - Press the SLOW button on the remote control during Playback.
  - To resume normal playback, press the ▶/II (PLAY/STILL) button.
- Reverse Slow Playback
  - Press the ◀II (−) button during Forward Slow Play back.
  - To resume forward slow playback, press the II▶ (+) button.
  - To resume normal playback, press the ▶/II (PLAY/STILL) button.

播放

PLAYER（播放）模式下的各种功能

- 摄录一体机和遥控器上有PLAY/STILL（播放/静止）、STOP（停止）、FF（快进）、REW（快倒）等按钮。
- 以下按钮只出现在遥控器上：F.ADV（帧步进）、X2（倍放）、SLOW（慢放）按钮。
- 为了防止录像带和磁鼓磨损，一旦摄录一体机在静止或慢放模式下超过5分钟，就会自动停止。

播放暂停

- 在播放期间，请按下 ▶/II（PLAY/ STILL）（播放/静止）按钮暂停。
- 如需继续播放，请再次按下 ▶/II（PLAY/STILL）（播放/静止）按钮。

图像搜索 （快进/快倒）

- 在Player（播放）模式和Still（静止）模式期间，按下 ▶▶ （FF）(快进）或 ◀◀ （REW）（快倒）按钮以进行搜索。
  如需恢复正常播放，按下 ▶/II （PLAY/STILL）（播放/静止）按钮即可。
- 在Player（播放）模式和Still（静止）模式期间，持续按住 ▶▶ （FF）（快进）或 ◀◀ （REW）（快倒）按钮以进行搜索。
  如需恢复正常播放，释放按钮即可。

慢放（向前/向后）

- 向前慢放
  - 在播放期间按下遥控器上SLOW（慢放）按钮。
  - 如需恢复正常重放，按下 ▶/II (PLAY/STILL)(播放/静止)按钮即可。
- 向后慢放

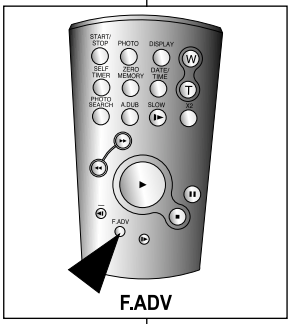
- 在向前慢放期间按下 ◀II（−）按钮。
- 如需恢复向前慢放，按下 II▶（+）按钮。
- 如需恢复正常重放，按下 ▶/II (PLAY/STILL)（播放/静止）按钮即可。

ENGLISH

Playback

Frame advance (To play back frame by frame)

- Press the F.ADV button on the Remote Control while in Still mode. The F.ADV function works in still mode only.
- To resume normal playback, press the ▶/II (PLAY/STILL) button.
  - ⌘ Forward frame advance
    - ■ Press the F.ADV button on the remote control in Still mode.
  - ⌘ Reverse frame advance
    - ■ Press ◀II (−) the button on the remote control to change the direction in F.ADV mode.
    - ■ Press the F.ADV button on the remote control.



X2 Playback (Forward/Reverse)

- ⌘ Forward X2 Playback
  - ■ Press the X2 button on the Remote Control during Playback.
  - ■ To resume normal playback, press the ▶/II (PLAY/STILL) button.
- ⌘ Reverse X2 Playback
  - ■ Press ◀II (−) the button during during Forward X2 Playback
  - ■ To resume normal playback, press the ▶/II (PLAY/STILL) button.

Reference

- ■ Mosaic shaped distortion may appear on the screen while in some of the various playback modes.
  - Mosaic shaped distortion or noise may be experienced when you play back tapes recorded in LP which contain various playback functions.
- ■ Sound will only be heard during normal SP or LP playback.

中文

播放

帧步进（逐帧播放）

- 在Still（静止）模式下，按下遥控器上的F.ADV（帧步进）按钮。
  只有在静止模式下才能使用F.ADV（帧步进）功能。
- 如需恢复正常播放，按下▶/II（PLAY/STILL）（播放/静止）按钮即可。
  - ⌘ 向前执行帧步进
    - ■ 在静止模式下，按下遥控器上的F.ADV（帧步进）按钮。
  - ⌘ 反向执行帧步进
    - ■ 在F.ADV（帧步进）模式下，按下遥控器上的◀II （－）按钮以改变帧步进的方向。
    - ■ 按下遥控器上的F.ADV（帧步进）按钮。

X2 播放（快进/快倒）

- ⌘ 快进 X2 播放
  - ■ 在播放过程中按下遥控器上的X2按钮。
  - ■ 如欲恢复正常播放，按下▶/II （PLAY/STILL）（播放/静止）按钮即可。
- ⌘ 快倒 X2 播放
  - ■ 在快倒X2播放过程中按下◀II （－）按钮。
  - ■ 如欲恢复正常播放，按下 ▶/II （PLAY/STILL）（播放/静止）按钮即可按钮。

注意

- ■ 在某些播放模式下，屏幕上可能出现马赛克状的失真。
  - 在您包含各种播放功能的LP（长时播放）模式下播放拍摄好的录像带时，可能会遇到马赛克状的失真或噪音。
- ■ 只有在正常的SP（标准播放）或LP（长时播放）播放期间，才能听到声音。

ZERO MEMORY

⌘ The MEMORY function works in both CAMERA and PLAYER modes.
⌘ You can mark a point on a tape that you want to return to following playback.

1. Press the ZERO MEMORY button on the remote control during playback or recording at the point you wish to return to.
   - The time code is changed to a tape counter that is set to zero memory with the [M] 0:00:00(Zero memory indicator)
   - If you want to cancel the zero memory function, press the ZERO MEMORY button again.

2. Finding the zero position.
   - When you have finished playback, fast forward or rewind the tape.
     - The tape stops automatically when it reaches the zero position.
   - When you have finished recording, press the power switch on the PLAYER and press the ◀◀ (REW) button.
     - The tape stops automatically when it reaches the zero position.

3. The tape counter with the [M] (Zero memory indicator) disappears from the display and the tape counter is changed to the time code.

Reference

- In the following situations, ZERO MEMORY mode may be canceled automatically:
  - At the end of the section marked with the ZERO MEMORY function.
  - When the tape is ejected.
  - When you remove the battery pack or power supply.
- The zero memory may not function correctly where there is a break between recordings on the tape.

ZERO MEMORY（零点记忆）

⌘ 只有在CAMERA（摄像机），PLAYER（放像机）模式下，才能使用MEMORY（记忆）功能。
⌘ 您可以在录像带标记一个要返回以连续播放的点。

1. 在播放或拍摄期间，请在要返回的点处按下遥控器上ZERO MEMORY（零点记忆）按钮。
   - 时间代码更改为录像带计数器，而该录像带计数器将置于零点记忆 [M] 0:00:00（零点记忆指示器）
   - 如果您想取消零点记忆功能，再次按下ZERO MEMORY（零点记忆）按钮即可。

2. 找到零点位置。
   - 在录像带播放完毕时，快进或快倒录像带。
     - 在录像带播放到尽头时，录像带将会自动停止。
   - 在完成拍摄时，请按下功能开关切换到PLAYER（播放），并按下 ◀◀ （REW）（快倒）按钮。
     - 在录像带播放到尽头时，录像带将会自动停止。

3. 带有 [M] （零点记忆指示器）的录像带计数器从显示器上消失，录像带计数器会转变成时间代码。

注意

- 在以下情况下，零点记忆模式可能会自动取消：
  - 在标有零点记忆功能的片段结尾。
  - 退出录像带时。
  - 在取出电池组或断开电源时。
- 在录像带上录像有中断的地方，零点记忆可能不会正常工作。

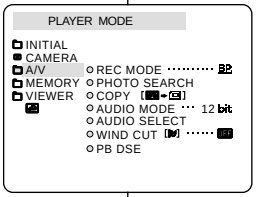
PB DSE (Playback Digital Special Effects)

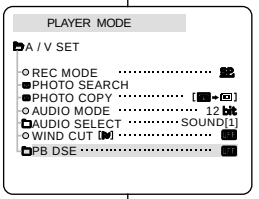
- The PB DSE function works in PLAYER mode.
- The PB DSE function enables you to apply Digital Special Effect (DSE) to tape playback or still images.

1. Set the camcorder to the PLAYER mode and then Playback a tape.
2. Press the MENU button and turn the MENU DIAL to highlight A/V.
3. Press the ENTER button to enter the sub-menu.
4. Select PB DSE from the sub-menu and press the ENTER button.
5. Press the ENTER button to enter the sub-menu.
6. Select PB DSE item (off, mirror, mosaic) from the sub-menu and press the ENTER button.
7. To exit, press the MENU button.
8. To cancel the PB DSE function, set the PB DSE to off or press the STOP button.

Reference

- You cannot apply the PB DSE function to the pictures which are being input from the external.
- Once you modify an image using the PB DSE function, it cannot be imported to your PC from the camcorder's DV jack.





PB DSE（播放数字特殊效果）

- 可以在PLAYER（播放）模式下使用PB DSE（播放数字特殊效果）功能。
- PB DSE（播放数字特殊效果）可以帮助您将数字特殊效果（DSE）应用于录像带播放或静止图像。

1. 将摄录一体机置于PLAYER（播放）模式，并播放录像带。
2. 按下MENU（菜单）按钮，并拨动MENU DIAL（菜单拨盘）高亮显示A/V。
3. 按下ENTER（确认）按钮进入子菜单。
4. 在子菜单中选择PB DSE（播放数字特殊效果），并按下ENTER（确认）按钮。
5. 按下ENTER（确认）按钮进入子菜单。
6. 从子菜单中选择PB DSE（播放数字特殊效果）选项［off（关闭）、mirror（镜像）、mosaic（马赛克）］，并按ENTER（确认）按钮。
7. 要想退出，按下MENU（菜单）按钮即可。
8. 要想取消PB DSE（播放数字特殊效果）功能，请将PB DSE（播放数字特殊效果）关闭或按下STOP（停止）按钮即可。

注意

- 您不可以对从外部输入的图像使用PB DSE（播放数字特殊效果）功能。
- 一旦您使用PB DSE（播放数字特殊效果）功能修改图像，将不可以从摄录一体机的DV孔导入到您的PC中。

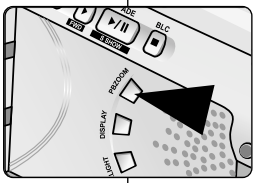
ENGLISH

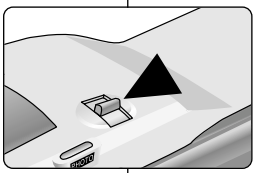
Playback

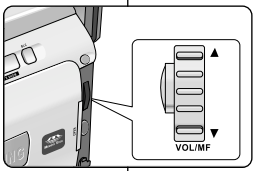
PB ZOOM

- The PB ZOOM function works in PLAYER mode.
- The PB ZOOM function enables you to magnify playback or still image.

1. Press the PB ZOOM button in playback mode or in playback still mode
2. The image is magnified starting from the center of image and the four arrows which allows you to move the image in the four directions appear.
3. You can zoom in from 1.2x to 8.0x by moving the zoom lever.
4. You can move the image in the arrow directions using the MENU DIAL.
5. You can change the arrow direction(vertical, horizontal) to move the image by pressing the ENTER button.
6. To cancel the PB ZOOM function, press the PB ZOOM or STOP button.







Reference

- You cannot apply the PB ZOOM function to the pictures which are being input from an external video source.
- The PB ZOOM image cannot be imported to your PC from the camcorder's DV jack.

中文

播放

PB ZOOM（播放缩放）

- 可以在PLAYER模式下使 用PB ZOOM（播放缩放 ）功能。
- PB ZOOM（播放缩放 ）可以支持 您放大播放图像和 静态图像。

1. 在PLAYER模式或播 放静态模式下，按下PB ZOOM（播放缩放 ）按钮。
2. 图像会从 图像的中心开始放 大，同时四个箭头可以允许您在四 个显示的方向上移 动图像。
3. 您可以通 过滑动变焦手柄将 放大系数在1.2X到8.0X之间更改。
4. 您可以使 用MENU DIAL（菜单拨盘）以在箭头 方向移动图像。
5. 您可以通 过按下ENTER（确认）按钮来更 箭头方向（垂直、水平）以移动图 像。
6. 要想取消PB ZOOM（播放缩放 ）功能，请按下PB ZOOM（播放缩放） 或STOP（停止）按钮即可 。

注意

- 您不可以 对从外部视频源输 入的图像使用PB ZOOM（播放缩放 ）功能。
- PB ZOOM（播放缩放）图像不可 以从摄录一体机的DV孔导入到 您的PC中。

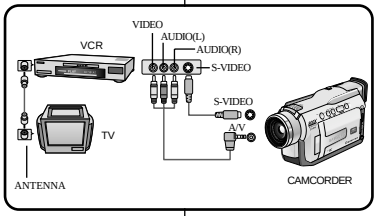
ENGLISH

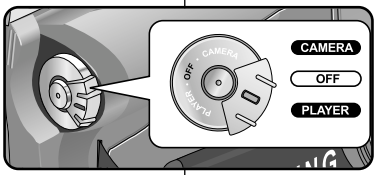
Recording in PLAYER mode

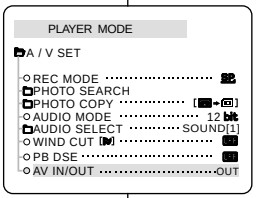
Recording in PLAYER mode (VP-D23i/D24i only)

- You can use this camcorder as a recorder.
- You can record a tape from VCR or TV.

1. Connect the camcorder and VCR or TV with the Audio/Video cable.
2. Set the power switch of the camcorder to PLAYER mode.
3. Turn on the VCR or TV.
4. Insert the blank tape with protection tab closed into the camcorder.
   - If you want to record from the connected VCR, insert a recorded VHS tape into the VCR.
5. Press the MENU button, turn the MENU DIAL to highlight A/V and press the ENTER button.
6. Turn the MENU DIAL to highlight AV IN/OUT and press the ENTER button to select AV IN.
7. Press the START/STOP button to set the camcorder to REC PAUSE mode.
   - "PAUSE" and picture appear on the LCD monitor.
8. Select the TV program or playback the VHS tape.
9. Press START/STOP button to start recording.
   - If you want to pause recording for a while, press the START/STOP button again.
10. To stop recording, press the ■ (STOP) button.







Reference

- When you record the images being played back on analog VCR, if they are not being played back in normal speed, (for example, more than double speed or slow playback), only gray image appears on the camcorder.
- If you want to see the camcorder picture with a TV, set AV IN/OUT menu to OUT.

中文

在播放模式中录制

在PLAYER（播放）模式录制（仅限于VP-D23i/D24i）

- 可以把本摄录一体机用作录像机。
- 可从录像机或电视录制录像带。

1. 使用A/V线连接摄录一体机和录像机或电视。
2. 将摄录一体机的功能开关置于PLYAER（播放）模式。
3. 打开录像机或电视。
4. 将空白的录像带插入到摄录一体机中，此时，录像带的写保护标签应处于闭合状态。
   - 如果要从连接的录像机录制，则将已录制的VHS录像带插入到录像机中。
5. 按下MENU（菜单）按钮，转动MENU DIAL（菜单拨盘）以高亮显示A/V，并按下ENTER（确认）按钮。
6. 转动MENU DIAL（菜单拨盘）以高亮显示AV IN/OUT，并按下ENTER（确认）按钮以选中AV IN。
7. 按下START/STOP（开始/停止）按钮，将摄录一体机设置为REC PAUSE（录制暂停）模式。
   - "PAUSE"（暂停）和图像将出现在液晶显示屏上。
8. 选择电视节目或播放VHS录像带。
9. 按下START/STOP（开始/停止）按钮，开始录制。
   - 如果想暂停录制一小会儿，则请再次按下START/STOP（开始/停止）按钮。
10. 若要停止录制，按下 ■ （STOP）（停止）按钮。

注意

- 当您录制在模拟录像机上播放的图像时，如果它们不以正常的速度播放的话，（例如，大于两倍的速度或慢速播放），那么摄录一体机上只能显示灰度图。
- 如果您想使用电视查看摄录一体机的图像，请将AV IN/OUT菜单设置为OUT。

ENGLISH

IEEE 1394 Data Transfer

Transferring IEEE1394 (i.LINK)-DV standard data connections

Connecting to a DV device

- ⌘ Connecting with other DV standard products.
  - ■ A standard DV connection is quite simple.
    If a product has a DV port, you can transfer data by connecting to the DV port using the correct cable.
  - !!! Please be careful since there are two types of DV ports, (4pin, 6pin). This camcorder has a 4pin terminal.
- ⌘ With a digital connection, video and audio signals are transmitted in digital format, allowing high quality images to be transferred.

Connecting to a PC

- ⌘ If you want to transmit data to a PC, you must install a IEEE 1394 add-on card onto the PC. (not supplied)
- ⌘ The frame rate recorded for video capturing is dependent on the capacity of the PC.

Reference

- ■ When you transmit data from the camcorder to another DV device, some functions may not work.
  If this occurs, please reconnect the DV cable or turn the power OFF and ON again.
- ■ When you transmit data from the camcorder to PC,
  PC function button is not available in M.PLAY mode.
- ■ Do not use the PC CAMERA and IEEE1394 together at the same time.
  This will shut off IEEE1394.

中文

IEEE 1394数据传输

传送 IEEE 1394（i.LINK）–DV标准数据连接

与DV设备连接

- ⌘ 与其它数字视频（DV）标准产品连接。
  - ■ DV标准连接非常简单。
    如果产品有一个数字视频（DV）端口，则可以使用一条合适的电缆与其它设备的数字视频（DV）端口连接，这样即可进行数据传输。
  - !!! 务必注意的是，有两种数字视频（DV）端口（4针型、6针型）。本摄录一体机使用的是4针型端口。
- ⌘ 利用数字连接装置时，视频与音频信号以数字形式传输，可以实现高质量的图像传输。

与PC机连接

- ⌘ 如果您需向PC机传输数据，则必须在PC上安装IEEE 1394外接卡。（未提供）
- ⌘ 视频捕捉的帧的录制速率取决于PC机的性能。

注意

- ■ 在您从摄录一体机向另一台DV（数字视频）设备传送数据时，可能不能使用某些功能。
  此时，请重新连接DV（数字视频）线，或者在关闭电源后重新将其打开。
- ■ 在M.PLAY模式下，不能将数据从摄录一体机上传输到PC机上。
- ■ 不要将PC摄像机和IEEE1394同时使用，否则会引起IEEE1394死机。

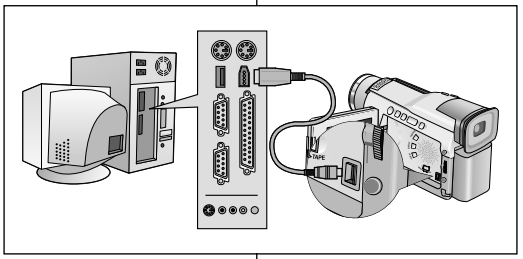
ENGLISH

IEEE 1394 Data Transfer

● System requirements

- CPU : faster Intel® Pentium III™ 450Mhz compatible.
- Operating system : Windows® 98SE, ME, XP, Mac OS (9.1~10.2)
- Main memory : more than 64 MB RAM
- IEEE1394 add-on card or built in IEEE1394 card

Recording with a DV connection cable (VP-D23i/D24i only)



1. Set the power switch to PLAYER mode.
2. Connect the DV cable (not supplied) from the DV IN/OUT port of the camcorder to the DV IN/OUT port of the other DV device.
   - Make sure that DV IN appears on the screen.
3. Press the START/STOP button to begin REC PAUSE mode.
   - PAUSE is displayed on the OSD.
4. Start playback on the other DV device while you monitor the picture.
5. Press the START/STOP button to start recording.
   - If you want to pause recording momentarily, press the START/STOP button again.
6. To stop recording, press the ■ (STOP) button.

Reference

- When using this camcorder as a recorder, the pictures that appear on a monitor may seem uneven, however recorded pictures will not be affected.
- Operations are not guaranteed for all of the recommended computer environments mentioned above.

中文

IEEE 1394数据传输

● 系统要求:

- CPU : Intel® Pentium III™ 450Mhz以上兼容
- 操作系统：Windows® 98SE, ME, XP，Mac OS（9.1~10.2）
- 主存储器：大于64 MB RAM
- IEEE1394外接卡或内置IEEE 1394卡

使用DV电缆连接录制（仅限于VP-D23i/D24i）

1. 将功能开关置于PLAYER（播放）模式。
2. 将DV电缆（未提供）从摄录一体机的DV输入/输出端口连接到另一台DV设备的DV输入/输出端口连接。
   - 保证屏幕上出现了DV IN。
3. 按下START/STOP（开始/停止）按钮进入REC PAUSE（录制暂停）模式。
   - PAUSE（暂停）将会在OSD（在屏显示）显示上。
4. 在您监视图像的同时，请启动另一台DV设备上的播放。
5. 按下START/STOP（开始/停止）按钮开始录制。
   - 如果您想立即暂停录制，请再次按下START/STOP（开始/停止）按钮。
6. 如需停止录制，请按下 ■ （STOP）（停止）按钮。

注意

- 当将本摄录一体机用作录像机时，显视器上的图像可能不稳定，但是录制的图像不会受到影响。
- 操作只能在以上提及的所有推荐环境中进行。

ENGLISH

USB interface

● Transferring a Digital Image through a USB Connection

- ⌘ You can easily transfer a still image from a camera, tape to a PC without additional add-on cards via a USB connection.
- ⌘ You can transfer an image to a PC via a USB connection.
- ⌘ If you transfer data to a PC, you need to install the software (Driver, Editing software) supplied with the camcorder.

System Requirements

- CPU : Intel® Pentium II™ 400 processor compatible or better
- Operating system : Windows® 98SE/ME/ 2000/XP
- RAM : 64 MB or more
- CD-ROM: 4x CD-ROM drive
- VIDEO : 65,000-colour or better video display card
- Available USB port
- Hard Disc : 4GB (8GB recommended)

Reference

- Intel® Pentium II™ is a trademark of the Intel Corporation.
- Windows® is a registered trademark of the Microsoft® Corporation.
- All other brands and names are property of their respective owners.
- Operations are not guaranteed for all of the recommended computer environments mentioned above.

中文

USB 接口

● 通过USB连接传送数字图像

- ⌘ 通过USB连接，您可以非常方便地从摄像机、录像带向PC传送静态图像，而不需要附加的外接卡。
- ⌘ 您可通过USB连接将图像传送到PC上。
- ⌘ 如果要向PC传输数据，您需要安装随机提供的软件（驱动程序、编辑软件）。

系统要求

- CPU：Intel® Pentium II™ 400Hz处理器兼容或更好的CPU
- 操作系统： Windows® 98SE/ME/ 2000/XP
- RAM：64MB 或更大
- CD-ROM：4x CD-ROM 驱动器
- 视频：65,000色或更好的视频显卡
- 可用的USB端口
- 硬盘：4GB（推荐8GB）

注意

- Intel® Pentium II™ 为Intel公司的商标。
- Windows®为 Microsoft® 公司的注册商标。
- 其它品牌和名称都属于各自的所有者。
- 操作只能在以上提及的所有推荐环境中进行。

ENGLISH

USB interface

Installing DVC Media 5.0 Program

- Do not connect the camcorder to PC before installing the program.
- If another camera or scanner is connected, please disconnect it in advance.
- This explanation is based on Windows® 98SE OS.

Program installation

1. Insert the software CD into CD-ROM drive.
   - Installation selection screen appears in the monitor.
2. If the installation selection screen does not appear after inserting the CD click “Run” on the Windows “Start” menu and execute SETUP.EXE file to begin installation.
   - When CD-ROM drive is set to “D:drive”, type “D:\setup.exe” and press Enter.
3. Click one of the icons listed below to install the selected software.
   (The program automatically check and install the driver which the PC is needed)
   - DVC Driver: USB removable Disk Driver (Windows® 98SE only)
     USB PC CAMERA Driver
   - Editing Software

Using the “removable Disk” function

- You can easily transfer data from a memory stick to a PC without additional add-on cards via a USB connection.

1. Set the mode switch to memory, set the power switch to CAMERA or PLAYER.
2. Connect one end of the USB cable to the USB jack on the camcorder and the other end to the USB connector on your computer.

Using the “PC camera” function

- You can use this camcorder as a PC CAMERA.
- When you connect to a Web site that can provide video chatting functions, you can use your camcorder for such functions.
- Using the camcorder with PC installed Net-meeting program, you can conduct video conference.
- The screen size of PC CAMERA is 160 X 120 Pixel.
- If PC is connected with the USB to the camcorder, the buttons which excepts the POWER SWITCH, MODE SWITCH, ZOOM SWITCH, and NIGHT-CAPTURE SWITCH are not operated.

1. Set the mode switch to Tape, set the power switch to CAMERA.
2. Connect one end of the USB cable to the USB jack on the camcorder and the other end to the USB connector on your computer.

1.

中文

USB 接口

安装DVC Media 5.0 程序

- 在安装 该程序之 前，请不要 将摄录一 体机连接 到PC 上。
- 如果连 接了另一 台摄像机 或扫描仪 ，则请事 先将其断 开。
- 本说明 以Windows® 98SE OS为例 。

安装程 序

1. 将CD插入CD-ROM驱动器 。
   - 显示器 上将出现 安装选择 屏幕 。
2. 如果在 插入CD后安装 程序不运 行，请单击Windows “Start”（开始 ）中的”Run”（运行 ）并运行 SETUP.EXE 来启动 安装。
   - 当CD-ROM驱动器 被设置为 “D: drive ”时，请键入：“D:\setup.exe” 并确认。
3. 单击已 选软件下 方所列出 的按钮之 一。 (该程序 会自动检测 并安装在 PC机中的 所需驱动 器中。)
   - DVC Driver（DVC驱动程序）: USB removable Disk Driver（USB可移动磁盘驱动 器）（仅限于Windows 98SE ）
     USB PC CAMERA Driver（USB PC照相机 驱动器）
   - Editing Software（编辑软 件）

使用 “可移动 磁盘”功能

- 通过 USB接口 ，您可以 不需要任 何外接卡 即可将记 忆棒中的 数据传送 给记忆棒中 的数据 。

1. 请将模 式转换到 memory（记忆棒 ），并将功 能开关旋 至CAMERA或 PLAYER。
2. 请把 USB线缆的 一端连入 摄像机的USB插孔 ，而将另 一端接入 您电脑中 的USB接口 。

使用 “PC 照相机”功能

- 您可以 将摄录一 体机用作 PC照相机 。
- 当您与 提供视频 聊天功能 的Web站点相 连时，您可以 将摄录一 体机用作 该功能 。
- 若在装 有Net-Meeting程序的 PC机上使 用摄录一 体机，则可以 召开视频 会议。
- PC CAMERA的屏幕 尺寸为160 × 120 像素 。
- 如果PC机与摄 录一体机 通过USB相连的 话， 那么除 了POWER SWITCH（功能开 关）、MODE SWITCH（模式开 关）、ZOOM SWITCH（缩放开关 ）和NIGHT-CAPTURE SWITCH（夜间拍 摄开关 ）外的所 有按钮都 不能使用。

1. 请将模 式转换到 Tape（录像带 ），并将功 能开关旋 至CAMERA。
2. 请把 USB线缆的 一端连入 摄像机的USB插孔 ，而将另 一端接入 您电脑中 的USB接口 。

ENGLISH

USB interface

Connecting to a PC

1. Connect a USB cable to the USB port on the PC.
2. Connect the other end of the USB cable into the proper terminal on the camcorder. (USB jack)

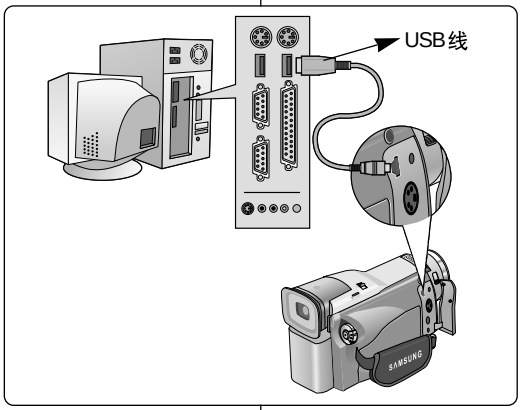
Disconnecting the USB cable

⌘ After completing the data transmission, you must disconnect the cable in the following way:

1. Select the removable disc icon and click the right mouse button to select [Eject].
2. Select [Confirm] and disconnect the USB cable when the Windows Splash screen appears.

Reference

- If you disconnect the USB cable from the PC or the camcorder while transferring, the data transmission will stop and the data may be damaged.
- If you connect the USB cable to a PC via a USB HUB or simultaneously connect the USB cable along with other USB devices, the camcorder may not work properly.
  - If this occurs, remove all USB devices from the PC and reconnect the camcorder.



中文

USB 接口

连接至PC

1. 在PC上将USB线连接至USB端口。
2. 将USB线的另一端接入摄录一体机的相应的端口。(USB插口)

断开USB线

⌘ 完成数据传输后必须将连线按如下方法断开:

1. 选择移动硬盘图标按下鼠标右键，选择[断开]。
2. 屏幕出现是否断开连接的对话窗时选择[确定]。

注意

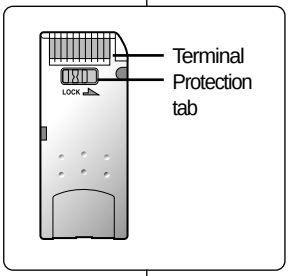
- 如果在传输过程中将USB线从PC机上或摄录一体机上拔出，数据传输将会立即停止且数据会受到破坏。
- 如果您使用USB HUB将USB线与PC相连，或者同时将USB线与USB设备相连，那么摄录一体机将无法正常工作。
  - 如果发生上述情形，请将从PC上移除所有的USB设备，并重新连接摄录一体机。

MEMORY STICK (VP-D24(i) only)

⌘ The Memory Stick(VP-D24(i) only) stores and manages still images recorded by the camera.

Memory Stick Functions

⌘ Recording still images and MPEG4 movie
⌘ Viewing still images
  - ■ Single
  - ■ Slide show
⌘ Multi display
⌘ Protecting images against accidental erasure
⌘ Deleting images recorded on a card
⌘ Print marking still images
⌘ Formatting a card (MEMORY STICK)



Reference

- ■ You can use most of the camera's functions when recording to the Memory Stick.
- ■ "▶▶ ▣" appears on the screen while recording to the Memory Stick.
- ■ While recording or loading an image, do not eject or insert the Memory Stick.
  - - Inserting or ejecting a Memory Stick while recording or loading an image can cause data damage.
- ■ If you want to save all images on the Memory Stick, set the write protect tab on the Memory Stick to LOCK.

MEMORY STICK™

- ● "Memory Stick" and MEMORY STICK™ are trademarks of Sony Corporation.
- ● All other product names mentioned herein may be the trademarks or registered trademarks of their respective companies. Furthermore, "™"and "®" are not mentioned in each case in this manual.
- ● "Memory Stick PRO" is not prepared.

记忆棒 （只限于VP-D24(i)）

⌘ 记忆棒（只限于VP-D24(i)）存储和管 理摄像机录制的静 止图像。

记忆棒的功 能

⌘ 录制静止图像
⌘ 以3种方式观 看静止图像
  - ■ 单幅图像
  - ■ 顺序播放
⌘ 多个画面
⌘ 防止图像被意外擦除
⌘ 删除录制 在记忆棒上的图像
⌘ 打印标记 的静止图像
⌘ 格式化记 忆棒

注意

- ■ 在录制到 记忆棒上时，可使用大 多数录像机的功能 。
- ■ 在录制到 记忆棒上时"▶▶ ▣"出现在屏 幕上。
- ■ 在录制或 加载图像时，不要取出 或装入记忆棒。
  - - 在录制或 加载图像时取出或 装入记忆棒会造 成数据破坏。
- ■ 如果您想 保存所有图像到记 忆棒上，将记忆棒 上的写保护标签置 于锁定。

MEMORY STICK™

- ● "记忆棒"和 MEMORY STICK™ 为索尼公 司的商标。
- ● 此处提到 的其它产品名称为 各自公司的商标 或注册商标。 此外，本手册中 不是随处都提到了"™"和"®"。
- ● 不事先准 备记忆棒程序。

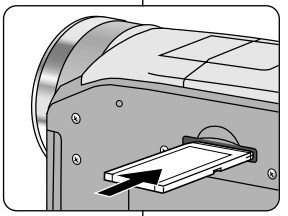
ENGLISH

Digital Still Camera mode

Inserting and ejecting the Memory Stick

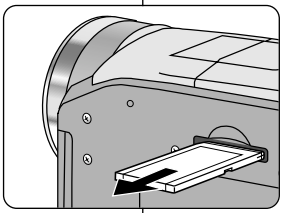
● Inserting the Memory Stick

1. Turn the Power switch to OFF.
2. Insert the Memory Stick into the CARD slot located beneath the camcorder, in the direction of the arrow.



● Ejecting the Memory Stick

1. Turn the Power switch to OFF.
2. Push the Memory Stick, then it comes out of the camcorder automatically.
3. Pull out the Memory Stick.



Reference

- If you set the camcorder to M.PLAY mode, the last recorded still image appears.
  - If there are no recorded images on the Memory Stick, NO STORED PHOTO! or NO STORED MPEG4! and will display on the screen.
- While recording, loading, erasing, or formatting, do not turn off the power or change the mode.
- Please turn the power off before you insert or eject the Memory Stick. You could lose data on the Memory Stick.

- Do not allow metal substances to come in contact with the terminals of the Card.
- Do not bend the Card.
- After pulling the card out from the camcorder, please keep the Memory Stick in a soft case to prevent static shock.
- The stored contents may be changed or lost as a result of misuse, static electricity, electric noise or repair. Save important images separately.
- Samsung is not responsible for data loss due to misuse.
- If the USB cable is connected to the camcorder, the ■, ▶/II (S.SHOW), ▶▶ (FWD), ◀◀ (REV) buttons are not available in M.PLAY mode.

中文

数码照相机模式

插入和取出 记忆棒

● 插入记忆棒

1. 将电源开关置于关闭。
2. 按箭头方向，将记忆棒 插入到摄录一体机 上记忆棒槽中。

● 取出记忆棒

1. 将电源开关置于关闭。
2. 向内推记忆棒，它会自动弹出。
3. 取出记忆棒。

注意

- 如果您将电源开关置于照片播放模式，会出现最后录制的图像。
  - 如果在记忆棒上没有录制图像，“NO STORED PHOTO! 或 NO STORED MPEG4!” 和 会显示在屏幕上。
- 在拍摄、载入、擦除或格式化时，请不要关闭电源或更改制式（模式）。
- 在装入或取出记忆棒之前，请将电源关闭。否则您可能会丢失记忆棒上的数据

- 不要让金属物质与记忆棒的端子接触。
- 不要将记忆棒弯曲。
- 在从摄录一体机拔出记忆棒后，请将记忆棒保存在软包中以防止静电触击。
- 由于错误使用、静电、电噪声或修理，存储的内容可能被改变或丢失。
  单独保存重要的图像。
- 三星对于错误使用而造成的数据丢失不负责。
- 如果将USB电缆连接到摄录一体机上，■（删除）、▶/II（顺序播放）、▶▶（快进）、◀◀（快倒）按钮在照片播放模式不能使用。

ENGLISH

Digital Still Camera mode

Structure of folders and files on the Memory Stick

- The still images that you recorded are saved in JPEG file format on the card.
- The moving images that you recorded are saved in MPEG4 file format on the card.
- Each file has a file number and all files are assigned to a folder.
  - A file number from DCAM0001 to DCAM9999 is sequentially assigned to each recorded image.
  - Each folder is numbered from 100SSDVC to 999SSDVC and recorded on the CARD.

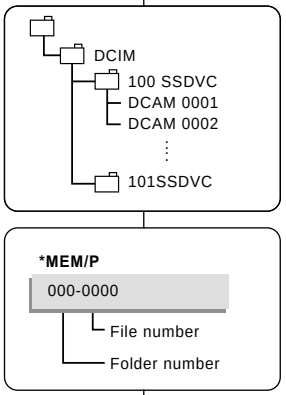


Image Format

- Still image
  - Images are compressed in JPEG (Joint Photographic Experts Group) format.
  - The number of pixels are 640 X 480 in each mode.
  - Amount of still image must be under 1.4MB.
- Moving Image
  - Images are compressed in MPEG (Moving Picture Experts Group) format.
  - The number of pixels are 352 X 288, 176 X 144 in each mode.

Selecting the CAMCORDER mode

- You can use this camcorder as a Digital Still Camera (DSC).
- You have to set the mode switch to MEMORY STICK position to use this camcorder as Digital Still Camera.
  - M.REC mode (Memory RECORD mode)
    1. Set the mode switch to MEMORY STICK.
    2. Set the power switch to CAMERA.
  - M.PLAY mode (Memory PLAYBACK mode)
    1. Set the mode switch to MEMORY STICK.
    2. Set the power switch to PLAYER.

中文

数码照相机模式

记忆棒上文件夹和文件的结构

- 录制的静止图像会以JPEG文件格式保存在记忆棒上。
- 录制的动态图像会以MPEG4文件格式保存在记忆棒上。
- 每个文件都有一个文件号且全部文件都被分配到一个文件夹。
  - 每个录制的图像被按顺序分配的了从DCAM0001到DCAM9999的文件号。
  - 每个文件夹的编号从100SSDVC到999SSDVC且被记录在记忆棒上。

图像格式

- 静止图像
  - 图像以JPEG格式压缩。
  - 每个模式的像素数为640 ×480。
  - 静态图像的容量必须在1.4MB以下。
- 动态图像
  - 图像以MPEG格式压缩。
  - 每个模式的像素为352 ×288或176 ×144。

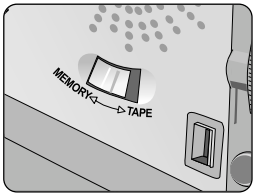
选择摄录一体机模式

- 可将本摄录一体机用作数字静止摄像机(DSC)。
- 若要将本摄录一体机用作数字静止摄像机，则必须将模式开关置于记忆棒位置。
  - 照片录制模式(记忆录制模式)
    1. 将模式开关置于记忆棒。
    2. 将电源开关置于摄像机。
  - 照片播放模式(记忆播放模式)
    1. 将模式开关置于记忆棒。
    2. 将电源开关置于播放。

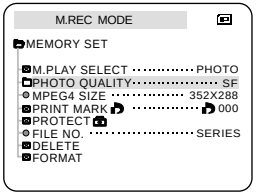
Selecting the image quality

⌘ You can select the quality of a still image to be recorded.

Select the image quality



1. Set the mode switch to MEMORY STICK.
2. Set the power switch to the CAMERA mode.
3. Press the MENU button.
   - The menu list will appear.
4. Turn the MENU DIAL to highlight MEMORY.
5. Press the ENTER button to enter the sub-menu.
6. Turn the MENU DIAL to highlight QUALITY in the submenu.
7. Press the ENTER button.
8. Using the MENU DIAL, select the image quality.
   - Press the ENTER button to confirm the image quality.
   - If you exit the sub-menu without pressing the ENTER button, the quality mode is not changed.
9. To exit, press the MENU button.



● Number of images on the Memory Stick

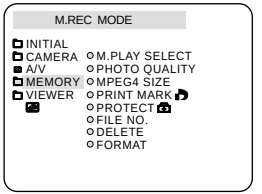
QUALITY	8MB	16MB
SUPER FINE	Approx.45	Approx.90
FINE	Approx.85	Approx.170
NORMAL	Approx.155	Approx.310

- The actual number that you can record varies depending on the image size.

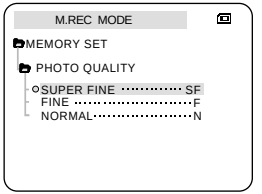
选择图像质量

⌘ 您可以选择录制的静止图像的质量。

选择图像质量



1. 将模式开关置于记忆棒。
2. 将电源开关置于摄像机模式。
3. 按菜单按钮。
   - 会出现菜单列表。
4. 转动菜单选择开关，使记忆突出显示。
5. 按下ENTER（确定）按钮，进入子菜单。
6. 转动菜单选择开关，使子菜单中的质量突出显示。
7. 按下ENTER（确定）按钮。
8. 使用菜单选择开关，选择图像质量。
   - 按下ENTER（确认）按钮确认图像质量。
   - 如果退出子菜单而没有按下ENTER（确认）按钮，质量模式不会改变。



9. 若要退出，按菜单按钮。

● 记忆棒上图像的质量

质量	8MB	16MB
精细	约45	约90
高质量	约85	约170
标准质量	约155	约310

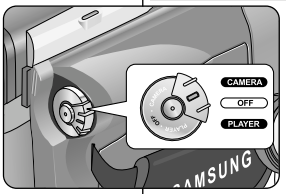
- 可录制的实际的数量取决于图像大小。

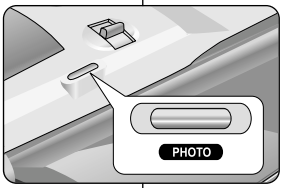
Recording Still images to a Memory Stick in M.REC Mode.

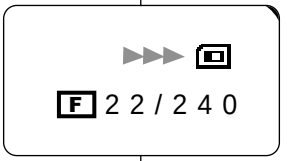
⌘ Audio cannot be recorded with still image onto the Memory Stick.

Recording images to a Memory Stick

1. Set the mode switch to MEMORY STICK.
2. Set the power switch to CAMERA.
3. Press the PHOTO button and hold it.
   - The still picture appears on the LCD monitor.
   - If you do not wish to record, release the button and wait for more than 2 seconds.
4. Release the PHOTO button and press the PHOTO button again in 2 seconds.
   - The still image is recorded to the Memory Stick.
   - While the camcorder is recording the still image, " ▶▶▶ " appears on the screen.







在照片录制模式将静止图像录制到记忆棒上。

⌘ 音频不能 作为静止图像录制 到记忆棒上 。

录制图像到 记忆棒上

1. 将模式开关置于记忆棒。
2. 将电源开关置于摄像机。
3. 持续按下 照片按钮。
   - 静止图像 出现在LCD显示屏上 。
   - 如果不想 录制，释放按下 的按钮后，等待2秒钟以上。
4. 释放照片 按钮后，在2秒内 ，再次按下 照片按钮。
   - 静止图像会被 录制到记忆棒上。
   - 在摄录一 体机录制静止图像 时，" ▶▶▶ " 出现在屏幕上 。

ENGLISH

Digital Still Camera mode

Recording an image from a cassette as a still image.

- ⌘ You can record still image from a cassette onto a Memory Stick.
- ⌘ If you want to recorded multiple still images from a cassette to a Memory Stick, use the COPY function.

1. Set the mode switch to TAPE.
2. Set the power switch to PLAYER mode.
3. Play back the cassette.
4. Press the PHOTO button and hold it.
   - ■ The camcorder is set to playback pause(STILL) mode.
   - ■ If you do not wish to record, release the button and wait for more than 2 seconds.
5. Release the PHOTO button and press the PHOTO button again in 2 seconds.
   - ■ The still image is recorded to the Memory Stick.
   - ■ While the camcorder is recording the still image, " ▶▶▶ " appears on the screen.

中文

数码照相机模式

从录像带图像制作静止图像。

- ⌘ 您可从录像带录制静止图像到记忆棒上。
- ⌘ 如果您想从录像带录制多个静止图像到记忆棒上，使用复制按钮。

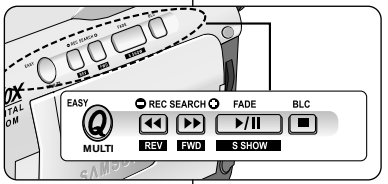
1. 将模式开关置于录像带模式。
2. 将电源开关置于播放模式。
3. 重放录像带。
4. 在出现您想录制的图像时，按下照片按钮。
   - ■ 录像带被置于重放暂停（静止）模式。
   - ■ 如果您想改变捕捉图像，而不录制，松开照片按钮，等待2秒钟以上，直到释放了静止图像，再次选择图像。
5. 在释放照片按钮后，在2秒内再次按下照片按钮。
   - ■ 静止图像被录制到记忆棒上。
   - ■ 在摄录一体机录制静止图像时，" ▶▶▶ " 出现在屏幕上。

Viewing Still images

- You can playback and view still images recorded on the Memory Stick.
- There are 2 ways to view recorded images.
  - Single : To view an image frame by frame.
  - Slide show : To view all images automatically and in consecutive order.

To view a Single image

1. Set the mode switch to MEMORY STICK.
2. Set the power switch to PLAYER mode.
   - The last recorded image appears.
     - If there are no recorded images on the Memory Stick, NO STORED PHOTO! or NO STORED MPEG4! and will display on the screen.
3. Using the ▶▶ (FWD) and ◀◀ (REV) buttons, search for the desired still image.
   - To view the next image : press the ▶▶ (FWD) button.
   - To view the previous image : press the ◀◀ (REV) button.
   - Pressing ▶▶ (FWD) when you are on the last image will take you to the first image and pressing ◀◀ (REV) when you are on the first image will take you to the last image.
   - Keep pressing ▶▶ (FWD) or ◀◀ (REV) to search for an image quickly.



To view a slide show

1. Set the mode switch to MEMORY STICK.
2. Set the power switch to PLAYER mode.
   - The last recorded image appears
3. Press the ▶/II (S.SHOW) button.
   - All images will be played back consecutively for 4~5 seconds each.
4. To stop the slide show, press the ▶/II (S.SHOW) button again.

观看静止图像

- 您可重放并观看录制在记忆棒上的静止图像。
- 观看录制的图像有2种方式。
  - 单幅图像： 逐帧观看图像。
  - 顺序播放： 按顺序自 动观看全部图像。

若要观看单 幅图像

1. 将模式开关置于记忆棒。
2. 将电源开关置于录像机模式。
   - 出现最后 录制的图像 。
     - 如果记忆 棒上没有录制的图 像，“NO STORED PHOTO! 或 NO STORED MPEG4!”和 会显示在 屏幕上。
3. 使用▶▶（快进）和◀◀（快倒）按钮，搜索所需 的静止图像。
   - 若要观看下一图像，按 ▶▶（快进）钮。
   - 若要观看上一图像，按 ◀◀（快倒）钮。
   - 在观看最后的图像时按 ▶▶（快进）钮会转到第一个图像，在观看第一个图像时按 ◀◀（快倒）钮，会转到最 后的图像。
   - 按住▶▶ （快进 ）或◀◀ （快倒 ）钮快速查找图 像。

若要观看顺 序播放

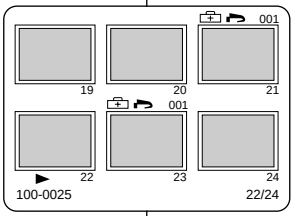
1. 将模式开关置于记忆棒。
2. 将电源开关置于播放模式。
   - 最后录制 的图像会出现 。
3. 按▶/II （顺序播放） 按钮。
   - 全部图像 会一个接一个重放4~5秒。
4. 若要停止 顺序播放，再次按下 ▶/II （顺序播放 ）按钮。

ENGLISH

Digital Still Camera mode

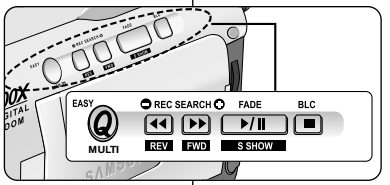
To view the Multi Screen

1. Set the mode switch to MEMORY STICK.
2. Set the power switch to PLAYER mode.
   - The last recorded image appears.
3. To view six stored images on single screen, press the MULTI button.
   - A selection mark (▶) appears under the image.
   - Turn the menu dial to select a image.
4. To return to single playback mode, press the MULTI button again.



Refernece

- To display the previous six images, press the ◀◀ (REV).
- To display the next six images, press the ▶▶ (FWD).



中文

数码照相机模式

若要观看多个画面

1. 将模式开关置于记忆棒。
2. 将电源开关置于录像机模式。
   - 最后录制的图像会出现。
3. 按下MULTI（多幅）按钮，在一个屏幕上观看6个图像。
   - 图像下面出现选择标记 (▶) 。
   - 移动菜单选择一个图像。
4. 返回播放模式，再次按下MULTI（多幅）按钮。

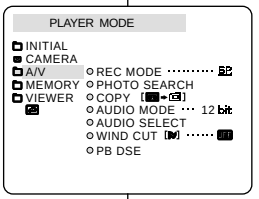
注意

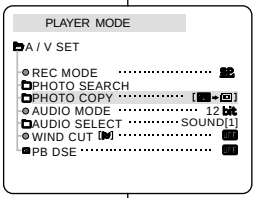
- 显示当前6个图像，按◀◀（快倒）。
- 显示下6个图像，按▶▶（快进）。

Copying still images from a cassette to Memory Stick

⌘ You can copy still images recorded with PHOTO function on a cassette onto a Memory Stick.

1. Set the power switch to the PLAYER mode.
2. Press the MENU button.
3. Turn the MENU DIAL to highlight A/V and press the ENTER button.
   - The submenu will appear.
4. Turn the MENU DIAL to highlight PHOTO COPY and press the ENTER button.
   - All still images that recorded on a cassette will be copied to a Memory Stick.
5. The camcorder automatically performs the photo search to find still images and copying starts.
6. Press ■ (STOP) button to stop copying.
   - Copying stops when the cassette is finished or Memory Stick is full.





从录像带上复制静止图像到记忆棒上

⌘ 您可通过照片功能将静止图像复制到记忆棒上。

1. 将模式开关置于播放模式。
2. 按菜单按钮。
3. 转动菜单选择开关使A/V突出显示并按下ENTER（确认）按钮。
   - 会出现子菜单。
4. 转动菜单选择开关以突出显示照片复制并按下ENTER（确认）按钮。
   - 录制在录像带上的全部静止图像会被复制到记忆棒上。
5. 摄录一体机会自动查找照片，以找到静止图像并开始复制。
6. 按下■（停止）按钮以停止复制。
   - 在录像带到了尽头或记忆棒已满，则复制停止。

Marking images for printing

- This camcorder supports the DPOF (Digital Print Order Format) print format.
- You can automatically print images recorded on a Memory Stick with a printer supporting DPOF.
- There are 2 ways to make a PRINT MARK.
  - THIS FILE : You can set a print mark on the photo image displayed on the LCD.
  - ALL FILES : To print 1 copy each of all of the stored images.

1. Set the mode switch to MEMORY STICK.
2. Set the power switch to PLAYER.
   - The last recorded image appears.
3. Using the ▶▶ (FWD) and ◀◀ (REV) buttons, search for the still image that you want to mark.
4. Press the MENU button.
5. Turn the MENU DIAL to highlight MEMORY and press the ENTER button.
   - The MEMORY SET submenu will appear.
6. Turn the MENU DIAL to highlight PRINT MARK, press the ENTER button.
7. Use the MENU DIAL to select either THIS FILE or ALL FILES and press the ENTER button.
8. Use the MENU DIAL to select the quantity and press the ENTER button.

Reference

- When you setup the PRINT MARK option to ALL FILES, 999 files from the current file are set to 1 or 0.
- The ALL FILES option may require extended operation time depending on the number of stored images.

在图像上做打印标记

- 本摄录一体机支持DPOF (数字打印顺序格式)打印格式。
- 您可通过支持DPOF的打印机自动打印录制在记忆棒上的图像。
- 有两种制作打印标记的方式。
  - 当前照片： 您可将显示在液晶显示屏上的照片图像设置打印标记。
  - 全部照片： 对于存储的图像，每个图像打印一份。

1. 将模式开关置于记忆棒。
2. 将电源开关置于录像机模式。
   - 会出现最后录制的图像。
3. 使用▶▶（快进）和◀◀（快倒）钮，查找需要做标记的静止图像。
4. 按菜单按钮。
5. 转动菜单选择开关以使记忆突出显示并按下ENTER（确认）按钮。
   - 会出现记忆设置子菜单。
6. 转动菜单选择开关以使打印标记突出显示，按下ENTER（确认）按钮。
7. 使用菜单选择开关以选择当前照片或全部照片，并按下ENTER（确认）按钮。
8. 使用菜单选择开关选择数量并按下ENTER（确认）按钮。

注意

- 在您设置了打印标记选项到全部照片时，将从当前照片开始打印存储的999个文件，并将当前照片设置为1或0号。
- 根据存储的图像的数量，全部照片选项可能需要延长操作时间。

Protection from accidental erasure

⌘ You can protect important images from accidental erasure.
- If you execute FORMAT, all images including protected images will be erased.

1. Set the mode switch to MEMORY STICK.
2. Set the power switch to PLAYER.
   - The last recorded image appears.
   - If there are no recorded images on the Memory Stick, NO STORED PHOTO! or NO STORED MPEG4! and will display on the screen.
3. Using the ▶▶ (FWD) and ◀◀ (REV) buttons, search for the still image that you want to protect.
4. Press the MENU button.
5. Turn the MENU DIAL to highlight MEMORY and press the ENTER button.
   - The submenu of MEMORY SET will appear.
6. Turn the MENU DIAL to highlight PROTECT and press the ENTER button.
7. Press the ENTER button to set PROTECT to ON or OFF.
   - THIS FILE : protects the currently selected file from erasure.
8. Using the ▶▶ (FWD) and ◀◀ (REV) buttons, search for the still image that you wish to protect.
9. To exit the menu, press the MENU button.

防止意外擦除

⌘ 您可保护重要的图像不被意外擦除。
- 如果您执行格式化，包括被保护图像的全部图像将被擦除。

1. 将模式开关置于记忆棒。
2. 将电源开关置于播放模式。
   - 出现最后录制的图像。
   - 如果记忆棒上没有录制的图像，“NO STORED PHOTO! 或 NO STORED MPEG4!”和会显示在屏幕上。
3. 使用▶▶（快进）和◀◀（快倒）钮，查找需要保护的静止图像。
4. 按菜单按钮。
5. 转动菜单选择开关以使记忆突出显示并按下ENTER（确认）按钮。
   - 会出现记忆设置子菜单。
6. 转动菜单选择开关以使保护突出显示，按下ENTER（确认）按钮。
7. 使用菜单选择开关，选择方法并按下ENTER（确认）按钮。
   - 当前照片：保护当前选择的文件不被擦除。
8. 使用▶▶（快进）和◀◀（快倒）按钮，查找需要保护的静止图像。
9. 若要退出菜单，按菜单按钮。

Deleting Still images

- You can erase the still images recorded on the Memory Stick.
- If you want to delete protected images, you must first deactivate the image protection.
- An image which has been deleted cannot be recovered.

1. Set the mode switch to MEMORY STICK.
2. Set the power switch to PLAYER.
3. Using the ▶▶ (FWD) and ◀◀ (REV) buttons, search for the still image that you want to delete.
4. Press the MENU button.
5. Turn the MENU DIAL to highlight MEMORY and press the ENTER button.
   - The MEMORY SET submenu will appear.
6. Turn the MENU DIAL to highlight DELETE and press the ENTER button.
   - Using the MENU DIAL, select either THIS FILE or ALL FILES and press the ENTER button.
   - THIS FILE : deletes only the file currently selected.
   - ALL FILES : deletes all files stored in the Memory Stick.
7. A box will appear to verify whether you wish to delete the image(s).
   - Using the MENU DIAL, select the item.
   - EXECUTE : deletes the selected image(s).
   - CANCEL : does not delete the selected image(s) and returns to the previous menu.

Reference

- If you try to delete a protected image, “PROTECT!” appears on the screen.

删除静止图像

- 您可擦除 录制在记忆棒上的 静止图像。
- 如果您想 删除保护的图像，首先取消 图像保护。
- 删除的图 像不能恢复。

1. 将模式开 关置于记忆棒。
2. 将电源开 关置于播放模式。
3. 使用▶▶ （快进）和◀◀ （快倒）钮，查找需要 删除的静止图像。
4. 按菜单按 钮。
5. 转动菜单 选择开关以使记忆 突出显示并按下ENTER（确认）按钮。
   - 会出现记忆设置子菜单。
6. 转动菜单 选择开关以使删除 突出显示，按下ENTER（确认）按钮。
   - 使用菜单 选择开关，选择本文 件或全部文件并按 下ENTER（确认）按钮。
   - 当前照片： 只删除当 前选择的照片。
   - 全部照片： 删除存储 在记忆棒上的全部照片。
7. 会出现一 个框以验证是否想 删除图像。
   - 使用菜单 选择所需的选项 。
   - 确定： 删除选择 的图像。
   - 取消： 不删除选 择的图像并返回到 上一菜单。

注意

- 如果您想 删除保护的图像，“保护！”会出现在 屏幕上。

Formatting the Memory Stick

- You can use the MEMORY FORMAT functions to completely delete all images and options on the Memory Stick, including protected images.
- The format function restores the Memory Stick to its initial state.
- The Memory Stick supplied with this camcorder has been formatted already.

Attention

- If you execute the MEMORY FORMAT function, all images will be erased completely and erased images cannot be recovered.

1. Set the mode switch to MEMORY STICK.
2. Set the power switch to PLAYER mode.
3. Press the MENU button.
4. Turn the MENU DIAL to highlight MEMORY and press the ENTER button.
   - The sub menu will appear.
5. Select FORMAT from the list and press the ENTER button.
6. “ALL FILES ARE DELETED! FORMAT REALLY?” appears on the screen.
7. Using the MENU DIAL, select the item.
   - NO : To return to previous menu
   - YES : To start formatting.
8. Press the ENTER button.
9. To exit the menu, press the MENU button.

Reference

- If you want to format the Memory Stick on your PC, use only the “Memory Stick formatter” supplied with the software CD.

格式化记忆棒

- 您可使用记忆格式化功能来完全删除记忆棒上的全部图像和选项，包括保护的图像。
- 格式化功能将记忆棒恢复到初始状态。
- 随本摄录一体机提供的记忆棒已经格式化。

注意

- 如果您执行记忆格式化功能，所有图像会被完全擦除且擦除的图像不能恢复。

1. 将模式开关置于记忆棒。
2. 将电源开关置于播放模式。
3. 按菜单按钮。
4. 转动菜单选择开关以使记忆突出显示并按下ENTER（确认）按钮。
   - 会出现子菜单。
5. 从列表选择格式化并按下ENTER（确认）按钮。
6. “全部文件被删除！真的格式化吗？"会出现在屏幕上。
7. 使用菜单选择开关，选择项目。
   - 否：返回上一菜单。
   - 是：开始格式化。
8. 按下ENTER（确认）按钮。
9. 若要退出菜单，按菜单按钮。

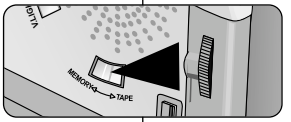
注意

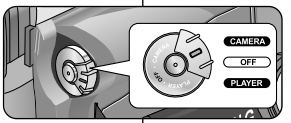
- 如果您想通过您的电脑格式化记忆棒，只能使用含有“格式化记忆棒”软件的光盘。

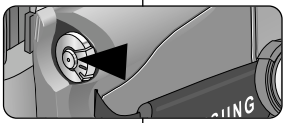
MPEG REC

Saving the pictures captured by a camera as a moving picture file onto MEMORY STICK

1. Check whether MEMORY STICK is inserted into the camcorder. If it is not in the camcorder, insert it onto the slot.
2. Set the mode switch to MEMORY STICK position.
3. Set the power switch to CAMERA mode.
4. Press the START/STOP button, the images which are being captured are recorded as a moving picture of MPEG4 type onto MEMORY STICK.
   - You can record 10 ~ 20 seconds continuously in once by the recording object.
   - You can record a camera still image onto memory stick by pressing the Photo key instead the START/STOP button.
5. Press the START/STOP button to stop the recording.

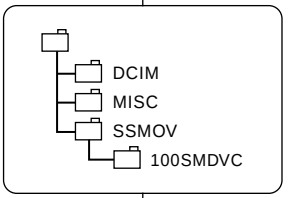






Reference

- Before using the MPEG REC function, check whether the MEMORY STICK is inserted into the camcorder.
- Moving pictures can be made in two sizes, 176 X 144 or 352 X 288 (Pixel).
- Moving images that you recorded are saved in *.asf file format on the memory stick.
- The file that you recorded are saved in a following folder.
- The moving picture images on a Memory Stick are smaller size and lower definition than one on Tape.
- The sound is recorded in type of mono.
- The following functions are not allowed in M.REC Mode.
  - DIS (Digital Image Stabilizer), Digital Zoom, Fade, Program AE, Digital Effect, Slow Shutter.
- While you record in Memory Stick, don't insert or eject the tape or it could be recorded the noise.
- While you record in Memory Stick, don't eject it or it might break the data on the Memory Stick or Memory Stick itself.



保存MPEG

将播放的图像作为动态图像存储在记忆棒中

1. 检查记忆棒是否安装妥当。若没有安装，请将记忆棒插入摄像机插口。
2. 将模式开关置于记忆棒位置。
3. 将电源开关置于照相机模式。
4. 按START/STOP（开始/停止）按钮，播放的图像会以MPEG4的格式作为动态图像存储在记忆棒中。
   - 每次录制时，您可连续录制10～20秒。
   - 按下照片按钮可将图像保存为静止图像。
5. 再次按START/STOP（开始/停止）按钮停止保存。

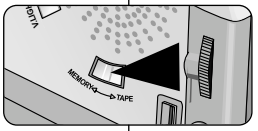
注意

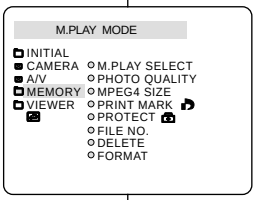
- 使用保存MPEG功能前请检查记忆棒是否安装妥当。
- 动态图像可保存为两种格式：176×144或352×288像素。
- 您拍摄的动态图像可以以*.文件格式存储在记忆棒中。
- 您拍摄的文件可以保存在以下文件夹中。
- 与录像带中的图像相比，记忆棒中的动态图像的尺寸偏小及清晰度偏低。
- 声音以单声道类型录制。
- 在M.REC Mode（照片模式）下，系统不支持以下功能：
  - DIS (Digital Image Stabilizer), Digital Zoom, Fade, Program AE, Digital Effect, Slow Shutter
- 当您使用记忆棒拍摄时，不得插入或弹出录像带。否则，会干扰拍摄效果。
- 当你使用记忆棒拍摄时，不得弹出录像带。否则，会损坏记忆棒上的数据或记忆棒。

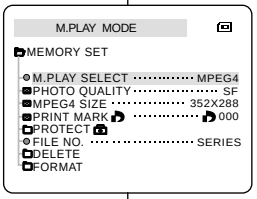
MPEG PB

- The MPEG PB function works in PLAYER mode only.
- The MPEG PB function allows you to watch the moving pictures (MPEG4) recorded.
- During the MPEG4 playback, you can hear sound at the PC speaker only (You cannot hear it from the speaker onto a camcorder and TV).

1. Set the mode switch to MEMORY STICK position.
2. Set the power switch to PLAYER mode.
3. Press the MENU button and turn the MENU DIAL to highlight MEMORY.
4. Press the ENTER button to enter sub-menu.
5. Use the MENU DIAL to select M.PLAY from the sub-menu.
6. Press the ENTER button to enter sub-menu.
7. Use the MENU DIAL to select MPEG4 from the sub-menu.
8. Press the PLAY/STILL button.
   - The moving pictures recorded into the MEMORY STICK are played back.







Reference

- There could be any broken or mosaic pictures while playing the MPEG4 moving picture images, but it is not malfunction.
- Sharp G.726 Audio Codec is automatically installed through Internet when you play the MPEG4 file.
- If sharp G.726 Audio Codec is not properly installed on your PC, it could not play Audio in the MPEG4 file.
- The moving picture images that you recorded in the Memory Stick might not be allowed to play by the camcorder of another brands.
- The MPEG4 file recorded by another camcorder might not be allowed to play by this camcorder.
  - You need Microsoft Windows Media Player Version 9 or higher version and Sharp G726 Audio Codec in order to play MPEG4 file on the Memory Stick on your PC. (Microsoft Windows Media Player Version 9 (Eng) is included in the CD that is supplied.)
  - You can download the Microsoft Windows Media Player applied each languages on Microsoft Website, “http://www.microsoft.com/windows/windowsmedia/download/default.asp”.

播放MPEG

- MPEG功能仅限于播放模式使用。
- 通过MPEG功能可观看动态图像（MPEG4格式）。
- 播放MPEG4格式的录像时，只能利用计算机的音箱来收听声音。（摄像机和电视机不能播放MPEG4格式录像的声音。）

1. 将模式开关置于记忆棒位置。
2. 将电源开关置于播放模式。
3. 按下菜单按钮转动菜单选择开关以使记忆突出显示。
4. 按下ENTER（确认）按钮进入子菜单。
5. 转动菜单选择开关在子菜单中选择照片播放。
6. 按下ENTER（确认）按钮进入子菜单。
7. 转动菜单选择开关在子菜单中选择MPEG4。
8. 按PLAY/STILL（播放/静止）按钮。
   - 存储在记忆棒中的动态图像将被播放。

注意

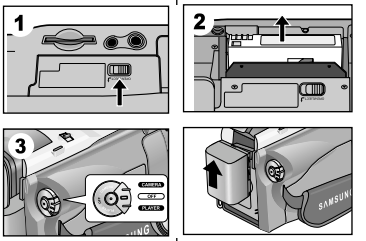
- 在播放MPEG4动态图像时，可能会出现图像暂停或马赛克图像，这并非故障。
- 当您播放MPEG4文件时，Sharp G.726 Audio Codec将通过因特网自行安装。
- 如果您的PC机中没有正确安装Sharp G.726 Audio Codec，那么将不能播放MPEG-4文件中的音频。
- 您在记忆棒中拍摄的动态图像不得在其他品牌的摄录一体机中播放。
- 由其他摄录一体机拍摄的MPEG-4图像也不得在本摄录一体机中播放。

- 您可以在您的PC机上使用Microsoft Windows Media Player Version 9或更高的版本以及Sharp G.726 Audio Codec来播放存储在记忆棒中的MPEG-4文件。［附机附赠的CD中附带有Microsoft Windows Media Player Version 9（英文版）］
- 如果想下载Microsoft Windows Media Player的不同语言版本，您可以访问Microsoft站点：http://www.microsoft.com/windows/windowsmedia/download/default.asp。

After finishing a recording

- At the end of a recording you must remove the power source.
- When recording with a Lithium Ion Battery Pack, leaving the pack on the camcorder can reduce the life span of the battery. Hence, it should be removed from the camcorder.

1. Slide the TAPE OPEN/EJECT switch in the direction of the arrow.
   - Opening the cassette door ejects the tape automatically.
   - Please wait while the tape is completely ejected.
2. After removing the tape, close the door and store the camcorder in a dust free environment.
   - Dust and other foreign materials can cause square-shaped noise or jerky images.
3. Set the power switch to the OFF mode.
4. Disconnect the power source or remove the Lithium Ion Battery Pack.
   - Hold down the BATTERY RELEASE button and slide the battery pack in the direction of the arrow.



完成拍摄后

- 结束录制后，必须断开电源。
- 在使用锂离子电池组拍摄时，将电池组留在摄录一体机上会缩短电池的使用寿命。因此必须将电池组从摄录一体机中取出。

1. 将TAPE OPEN/EJECT（录像带打开/退出）开关沿箭头所示方向滑动。
   - 打开带舱门，自动退出盒带。
   - 请等到盒带全部安全退出为止。
2. 取出盒带后，关闭带舱门，并将摄录一体机保存在无尘环境中。
   - 灰尘和其它异物会造成方形噪波或抖动的图像。
3. 将功能开关置于OFF（关闭）模式。
4. 断开电源，或取出锂离子电池组。
   - 按住BATTERY RELEASE（电池舱开关）按钮并按箭头所示的方向滑动电池组。

Cleaning and Maintaining the Camcorder

Cleaning the Video Heads

To ensure normal recording and clear pictures, clean the video heads when the playback pictures display square block-shaped noise or distortion, or a blue screen appears.

1. Set the power switch to PLAYER mode.
2. Insert the cleaning tape.
3. Press the ▶/II (PLAY/STILL) button.
4. Press the ■ (STOP) button after 10 seconds.

Reference

- Check the quality of the picture using a videocassette.
  If the picture quality has not improved, repeat the operation.
  If the problem continues, contact your local authorized service center.
- Clean the video heads with a dry type cassette cleaner.

清洁与维护摄录一体机

清洁视频磁头

为保证正常拍摄和图像的清晰，请在播放过程中发现图像出现方形噪波或失真或出现蓝屏时，清洁视频磁头。

1. 将功能开关设置为PLAYER（播放）模式。
2. 插入清洁带。
3. 按下▶/II（PLAY/STILL）（播放/静止）按钮。
4. 10秒钟后按下■（STOP）（停止）按钮。

注意

- 用录像带检查清洁后的图像质量。
  如果图像质量仍然不好，则请重复清洁视频磁头的操作。
  如果还存在问题，则请与当地的客服中心联系。
- 请使用干式清洁带清洁视频磁头。

Using Your Camcorder Abroad

⌘ Each country or region has its own electric and colour systems.
⌘ Before using your camcorder abroad, check the following items.

Power sources

- You can use your camcorder in any country or area with the supplied AC Power Adapter within 100V to 240V, 50/60 Hz.
- Use a commercially available AC plug Adapter, if necessary, depending on the design of the local wall outlet.

Colour system

- You can view your recording in the viewfinder.
  However, to view it on a television or copy it to a videocassette recorder, the television or VCR must be PAL-compatible and have the appropriate audio/video jacks.
  Otherwise, you may need to use a transcoder.

● PAL-compatible Countries/Regions
Australia, Austria, Belgium, Bulgaria, China, CIS, Czech Republic, Denmark, Egypt, Finland, France, Germany, Greece, Great Britain, Holland, Hong Kong, Hungary, India, Iran, Iraq, Kuwait, Libya, Malaysia, Mauritius, Norway, Romania, Saudi Arabia, Singapore, Slovak Republic, Spain, Sweden, Switzerland, Syria, Thailand, Tunisia, etc.

● NTSC-compatible Countries/Regions
Bahamas, Canada, Central America, Japan, Mexico, Philippines, Korea, Taiwan, United States of America, etc.

Reference

You can make recordings with your camcorder and view pictures on the LCD from anywhere in the world.

在国外使用摄录一体机

⌘ 每个国家或地区都有自己的电子和彩色制式。
⌘ 在国外使用摄录一体机之前，应检查以下项目。

电源

- 只要您所到的国家或地区的电源处在100V到240V、50/60Hz电源范围内，您就可以通过随机提供的交流电源适配器来使用摄录一体机。
- 如有必要，根据当地墙上插座的设计，使用市场上销售的交流插头适配器。

彩色制式

- 您可以从取景器中观看录制的图像。
  不过，要想在电视机上观看录制的图像或将其复制到盒带式录像机上，电视机或盒带式录像机必须与PAL制式兼容，并配备有相应的音频/视频插孔。
  否则，您需要配备一台彩色变码器。

● 与PAL制式兼容的国家/地区
澳大利亚、奥地利、比利时、保加利亚、中国、独联体各国、捷克共和国、丹麦、埃及、芬兰、法国、德国、希腊、英国、荷兰、香港、匈牙利、印度、伊朗、伊拉克、科威特、利比亚、马来西亚、毛里求斯、挪威、罗马尼亚、沙特阿拉伯、新加坡、斯洛伐克共和国、西班牙、瑞典、瑞士、叙利亚、泰国、突尼斯等。

● 与NTSC制式兼容的国家/地区
巴哈马、加拿大、中美洲、日本、墨西哥、菲律宾、韩国、台湾、美国等。

注意

您可以用摄录一体机在世界上任何地点摄像，并可通过液晶显示屏观看播放的图像。

Troubleshooting

Troubleshooting

⌘ Before contacting a Samsung authorized service center, perform the following simple checks.
They may save you the time and expense of an unnecessary call.

Self Diagnosis Display

Display	Blinking	Informs that...	Action
▭	slow	the battery pack is almost discharged.	Change to a charged one.
TAPE END!	slow	When the remaining time on the tape is about 2 minutes	Prepare a new one.
TAPE END!	no	the tape reached its end.	Change to a new one.
TAPE!	slow	there is no tape in camcorder.	Insert a tape.
PROTECTION!	slow	the tape is record protected.	If you want to record, release the protection.
⏏···D L C R	slow	the camcorder has some mechanical fault.	1. Eject the tape. 2. Set to OFF. 3. Detach the battery. 4. Reattach the battery. * If unresolved contact your local service representative.
	slow	moisture condensation has formed in the camcorder.	see below.

Moisture Condensation

⌘ If the camcorder is brought directly from a cold place to a warm place, moisture may condense inside the camcorder,
on the surface of the tape, or on the lens. In this condition, the tape may stick to the head drum and be damaged or the unit may not operate correctly.
To prevent possible damage under these circumstances, the camcorder is fitted with a moisture sensor.

⌘ If there is moisture inside the camcorder, (DEW) is displayed. If this happens, none of the functions except cassette ejection will work.
Open the cassette compartment and remove the battery.
Leave the camcorder for at least two hours in a dry warm room.

故障排除

故障排除

⌘ 在与三星授权的客服中心联系之前，应完成以下简单的检查。
这样就会为您节省时间和不必要电话的开支。

自诊断显示

显示	闪烁	信息...	排除故障措施
▭	慢	电池组所充电量几乎完全耗尽。	换上已经充满电的电池组。
TAPE END!	慢	录像带剩余时间约为2分钟时。	准备一盒新录像带。
TAPE END!	无	录像带已用尽。	换装一盒新录像带。
TAPE!	慢	摄录一体机中无录像带。	插入录像带。
PROTECTION!	慢	录像带受到写保护。	如果想进行录制，请取消写保护。
⏏···D L C R	慢	摄录一体机发生机械故障。	1. 退出盒带。 2. 设置为OFF（关）。 3. 取出电池。 4. 重新装入电池。 * 如果故障没有解决，则应与当地客服中心联系。
	慢	摄录一体机内发生结露现象。	见下文。

结露

⌘ 如果将摄录一体机从寒冷场所直接带入温暖场所，湿气有可能在摄录一体机内部、录像带表面或镜头上形成冷凝水。在这种情况下，录像带有可能粘附在磁头磁鼓上而受损，或者使摄录一体机不能正常操作。
为防止在这些情况下导致可能的损坏，摄录一体机装备有湿度传感器。

⌘ 如果摄录一体机内部有湿气，则显示 “DEW”（结露）。如果发生这种情况，那么不能使用除了盒带退出外的其他功能。
打开带舱，取出电池。
将摄录一体机放置于干燥温暖的室内2小时或2小时以上。

Troubleshooting

Self Diagnosis Display in M.REC/M.PLAY mode

Display	Blinking	Informs that...	Action
MEMORY STICK!	slow	There no Memory stick in the camcorder.	Insert a Memory Stick.
MEMORY FULL!	slow	There is not enough memory to record.	Change to a new Memory Stick. Erase recorded image.
NO STORED PHOTO! or NO STORED MPEG4!	slow	There are no images recorded on the Memory Stick.	Record new images.
WRITE PROTECT!	slow	The Memory Stick is record protected.	Release the write protect tab on the Memory Stick.
PROTECT!	slow	When you try to delete to protected image.	Cancel the protect of image.
READ ERROR!	slow	The camera can not playback.	Format a Memory Stick or insert Memory Stick recorded on this camcorder.
WRITE ERROR!	slow	The camera can not record.	Format a Memory Stick or change to a new Memory Stick.
NOT FORMATTED!	slow	The card or memory needs to format.	Format a Memory Stick.
NOW DELETE...	slow	When progressing FILE DELETE.	Wait until Delete has finished.
NOW FORMAT...	slow	When progressing MEMORY FORMAT.	Wait until formatting has finished.
NOW COPY...	slow	When progressing FILE COPY.	Wait until copying has finished.

故障排除

在照片录制/照片播放模式自诊断显示

显示	闪烁	信息...	排除故障措施
MEMORY STICK! (内存条)	慢	摄录一体机中没有内存条。	插入内存条。
内存已满!	慢	没有足够的内存来录制。	更换一张新卡或擦除录制的图像。
NO STORED PHOTO! 或 NO STORED MPEG4!	慢	SMC 或内存中没有录制的图像。	录制新的图像。
写保护!	慢	内存条受到保护防止录制。	去除内存条上的写保护标签。
保护!	慢	在您试图删除保护的图像时。	取消图像保护。
读错误	慢	摄像机不能重放。	格式化内存条或插入在本摄录一体机上录制的内存条。
写错误	慢	摄像机不能录制。	格式化内存条或更换一个新的内存条。
不能格式化	慢	内存条需要格式化	格式化内存条。
现在删除……	慢	在进行文件删除时。	等待直到删除结束
现在格式化……	慢	在进行内存格式化时。	等待直到格式化结束。
现在复制……	慢	在进行文件复制时。	等待直到复制结束。

ENGLISH

Troubleshooting

⌘ If these instructions do not solve your problem, contact your nearest Samsung authorized service centrer.

Symptom	Explanation/Solution
You cannot switch the camcorder on.	Check the battery pack or the AC Power Adapter.
START/STOP button does not operate while recording.	Check the POWER switch is set to CAMERA. You have reached the end of the cassette. Check the record protection tab on the cassette.
The camcorder goes off automatically.	You have left the camcorder set to STBY for more than 5 minutes without using it. The battery pack is fully exhausted.
The battery pack is quickly exhausted.	The atmospheric temperature is too low. The battery pack has not been charged fully. The battery pack is completely dead, and cannot be recharged, Use another battery pack.
When you see a blue screen during playback.	The video heads may be dirty. Clean the head with a cleaning tape.
A vertical strip appears on the screen when recording a dark background.	The contrast between the subject and the background is too great for the camcorder to operate normally. Make the background bright to reduce the contrast or use the BLC function while you are recording brighter.
The image in the viewfinder is blurred.	The Viewfinder lens has not been adjusted. Adjust the viewfinder control lever until the indicators displayed on the viewfinder come into sharp focus.
Auto focus does not work.	Check the M.FOCUS menu. Auto focus does not work in the Manual Focus mode.
Play, FF or REW button does not work.	Check the POWER switch. Set the power switch to PLAYER. You have reached the beginning or end of the cassette.
When you see a broken block image during the RECORD SEARCH.	This is normal operation and it is not a failure or defect.

中文

故障排除

⌘ 如果这些说明未能帮助您排除故障，则请与经过授权的三星客服中心联系。

故障现象	原因/排除方法
无法开启摄录一体机	请检查电池组或交流电源适配器
拍摄时无法操纵START/STOP按钮	请检查电源开关，将其设定到CAMERA位置；盒带已到达终点；请检查盒带上的录制保护标签。
摄录一体机自动关机	摄录一体机设定于待机状态，闲置未使用的时间超过5分钟；电池组电能完全用尽。
电池组电能很快用尽	环境温度过低； 电池组充电不足； 电池组已报废，无法为其充电。请使用另一电池组。
播放时看到蓝屏	视频磁头脏污。 用清洁带清洁磁头。
在录制屏幕的黑色背景上出现垂直条纹	被摄体与背景之间的对比度过大，使摄录一体机不能正常操作。提高背景亮度，减小反差；或在拍摄较亮的背景时使用BLC（背光补偿）功能。
取景器中的图像模糊不清	取景器透镜未经调整。 调整取景器控制手柄，直到显示在取景器上的指示标识清晰为止。
自动调焦功能失灵	检查手动调焦菜单。在手动调焦模式下，自动调焦功能不起作用。
播放、快进和快倒等按钮均失灵	检查POWER（功能）开关，将电源开关设置为PLAYER（播放）。盒带已到达最始端或最末端。
在RECORD SEARCH（拍摄记录搜索）过程中看到断续方块形图像	这属于正常现象，并非故障或缺陷。

ENGLISH

Specifications

Model name: VP-D23/D24/D23i/D24i

System	
Video signal	PAL
Video recording system	2 rotary heads, Helical scanning system
Audio recording system	Rotary heads, PCM system
Usable cassette	Digital video tape (6.35mm width): Mini DV cassette
Tape speed	SP: approx. 18.83mm/s LP: approx. 12.57mm/s
Tape recording time	SP: 60 minutes (when using DVM 60), LP: 90 minutes (when using DVM 60)
FF/REW time	Approx. 180 sec. (using DVM60 tape)
Image device	CCD (Charge Coupled Device)
Lens	F1.4 10x(Optical), 800x(Digital) Electronic zoom lens
Filter diameter	Ø37
LCD monitor/Viewfinder	
Size/dot number	2.5inchs (112,000)
LCD monitor Method	TFT LCD
Viewfinder	0.24" B/W LCD
Connectors	
Video output	1Vp-p (75Ω terminated)
S-video output	Y: 1Vp-p, 75Ω, C: 0. 286Vp-p, 75Ω
Audio output	-7.5dBs (600Ω terminated)
DV input/output	VP-DXXi: 4pin special in/out connector, VP-DXX: out only
USB output	Mini-B type connector
External mic	Ø3.5 stereo

General	
Power source	DC 8.4V, Lithium Ion Battery Pack 7.4V
Power source type	Lithium Ion Battery Pack, Power supply (100V~240V) 50/60Hz
Power consumption (Recording)	5.0W(LCD), 3.9W(VIEWFINDER)
Operating temperature	0˚~40˚C (32˚F~104˚F)
Storage temperature	-20˚C ~ 60˚C (-4˚F ~ 140˚F)
External dimension	Length 7inches(156mm), Height 3.54inches(90mm), Width 2.48inches(58mm)
Weight	1.21lbs(500g) (Except for Lithium Ion Battery Pack and tape)
Built-in MIC	Omni-directional stereo condenser microphone
Remote control	Indoors: greater than 49ft(15m) (straight line), Outdoors: greater than 16.4ft(5m) (straight line)

- These technical specifications and design may be changed without notice.

中文

技术规格

型号: VP-D23/D24/D23i/D24i

系统	
视频信号	PAL
视频录制系统	2个旋转头，螺旋扫描系统
音频录制系统	旋转头，PCM系统
可使用的录像带	数字视频录像带（宽6.35mm）: 微型数字视频（DV）盒带
录像带速度	标准播放：约18.83mm/秒 长时播放：约12.57mm/秒
录像带录制时间	标准播放：60分钟（使用DVM60时）， 长时播放：90分钟（使用DVM60时）
快进和快倒时间	约180秒（使用DVM60型录像带时）
图像设备	CCD（电荷耦合器件）
镜头	F1.4 10x（光学放大倍数）800x（数字放大倍数） 电子变焦镜头
滤光器直径	Ø37
液晶显示屏/取景器	
大小/点数	2.5英寸(112,000)
液晶显示屏方式	TFT液晶显示屏
取景器	0.24" B/W LCD
连接器	
视频输出	1Vp-p (75Ω 端接)
S-video output(S-视频)输出	Y: 1Vp-p, 75Ω, C: 0. 286Vp-p, 75Ω
音频输出	-7.5dBs (600Ω 端接)
DV(数字视频)输入/输出	VP-DXXi：4针专用输入/输出连接，VP-DXX：只输出
USB 输出	小型B 型连接器
外接话筒	Ø3.5 立体声

概述	
电源	DC8.4V，锂离子电池组7.4V
电源种类	锂离子电池组， 电源(100V~240V) 50/60Hz
功耗（拍摄）	5.0W（液晶显示屏），3.9W（VIEWFINDER）
操作温度	0˚~40˚C (32˚F~104˚F)
储存温度	-20˚C ~ 60˚C (-4˚F ~ 140˚F)
外形尺寸（长×高×宽）	156mm × 90mm × 58mm（7in × 3.45in × 2.48in）
重量	1.21lbs(500g) （锂离子电池组和盒带除外）
内置话筒	全向性立体声电容式话筒
遥控	室内：大于15米（49ft）（直线距离）， 室外：大于5米（16.4ft）（直线距离）

- 本产品的技术规格和设计可能会修改，恕不另行通知。

ENGLISH

INDEX

- A -

Accessories 12
Audio dubbing 63
AUDIO MODE 51

- B -

Battery Pack 24
BEEP 39
BLC 61

- C -

Cassette 27
Cleaning 99
CLOCK SET 37
Connecting 71

- D -

DATE/TIME 53
DC Cable 23
Deleting 94
DEMONSTRATION 41
DIS 47
DSE 48
DV 78, 79

- E -

EASY Mode 59
EXPOSURE 57

- F -

Fade 62
Formatting 95
Frame advance 73
Functions buttons 14

- H -

Hand Strap 22

- I -

IEEE1394 78

- L -

LCD 30, 31

- M -

Memory Stick 83, 87
MF/AF 60

- O -

OSD 18, 19

- P -

PHOTO quality 86
PHOTO SEARCH 65
PROGRAM AE 42
Protection 93

- Q -

Quick Menu 55

- R -

REC MODE 50
REC Search 29
REMOCON 38
Remote control 17, 20

- S -

SHUTTER SPEED 56
Sound 34
Speaker 34
Still images 89

- T -

TV DISPLAY 54

- U -

USB 80

- V -

Viewfinder 30, 32

- W -

WHT. BALANCE 44
WIND CUT 52

- Z -

ZERO MEMORY 74
Zoom 45, 46

中文

INDEX

- B -

白平衡（WHT.BALANCE） 44
背光补偿（BLC）..... 61
变焦 45,46

- C -

程序自动曝光(PROGRAM AE) 42

- D -

DC线 23
DV 78,79
淡化..... 62
电池组（Battery Pack） 24
电视（TV）显示.....54

- F -

风声消除（WIND.CUT） 52
蜂鸣音（BEEP） 39
附件..... 12

- G -

功能按钮 14

- H -

盒带..... 27

- I -

IEEE1394 78
简易（EASY）模式 59

- K -

快捷菜单 55
快门速度（SHUTTER SPEED）.....56

- L -

连接..... 71
零点记忆（ZERO MEMORY）.....74
拍摄记录搜索（REC Search）.....29
曝光（EXPOSURE）.....57

- Q -

清洁..... 96
取景器.....30.32

- R -

日期/时间 53

- S -

声音..... 34
时钟设置（CLOCK SET）.....37
手带 22
手动聚焦/自动聚焦（MF/AF）.....62
数字图像稳定器（DIS）.....47
数字特殊效果（DSE）.....48

- Y -

演示状态 41
扬声器.....34
遥控（REMOCON）.....38
遥控器 17,20
液晶显示屏（LCD）.....30,31
音频模式（AUDIO MODE）.....63
音频配音.....51

- Z -

在屏显示（OSD）..... 18,19
照片搜索..... 65
帧步进 73
Protection 93

- U -

USB 80

ENGLISH

THIS CAMCORDER IS MANUFACTURED BY:

*Samsung Electronics' Internet Home Page

United Kingdom	http://www.samsungelectronics.co.uk
France	http://www.samsung.fr
Australia	http://www.samsung.com.au
Germany	http://www.samsung.de
Sweden	http://www.samsung.se
Poland	http://www.samsung.com.pl
Spain	http://www.samsung.es
Italia	http://www.samsung.it
China	http://www.samsung.com.cn

中文

本摄录一体机制造厂商:

*三星电子主页

联合王国	http://www.samsungelectronics.co.uk
法国	http://www.samsung.fr
澳大利亚	http://www.samsung.com.au
德国	http://www.samsung.de
瑞典	http://www.samsung.se
波兰	http://www.samsung.com.pl
意大利	http://www.samsung.es
西班牙	http://www.samsung.it
中国	http://www.samsung.com.cn